



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>





Yvan A. 3

B

74

T954





History of Philosophy

BY

WILLIAM TURNER, S.T.D. //



BOSTON, U.S.A., AND LONDON

GINN & COMPANY, PUBLISHERS

The Athenæum Press

1915

ENTERED AT STATIONERS' HALL

COPYRIGHT, 1903

By WILLIAM TURNER

ALL RIGHTS RESERVED

24-9

PREFACE

THE purpose of the writer in compiling this text-book has been so to set forth the succession of schools and systems of philosophy as to accord to Scholasticism a presentation in some degree adequate to its importance in the history of speculative thought.

Of the text-books that are at present available for use in the lecture room, some dismiss the Scholastic period with a paragraph ; others, while dealing with it more sympathetically, treat it from the point of view of German transcendentalism. The result is that even works which succeed in doing justice to the schoolmen are practically useless to students who are more familiar with the terminology of Scholasticism than with that of Hegelianism.

The scope of the work has determined not only the general arrangement of the volume, but also the selection of material and of bibliographical references. Under the title "Sources," the student will find mention of the most recent publications and of one or two standard works which have been selected as being most easy of access. Bibliography is rapidly becoming a distinct branch of study in the different departments of philosophy. Dr. Rand's *Bibliography of Philosophy*, which is to be published as the third volume of Baldwin's *Dictionary of Philosophy and Psychology*, will doubtless meet the demand as far as completeness is concerned, and will render unnecessary the attempt to furnish

complete lists of sources in a text-book such as this is intended to be. It is, therefore, with a view to inculcate a proper idea of historical method rather than to supply a complete bibliography that a paragraph entitled "Sources" is prefixed to each chapter.

Similarly, it is for the purpose of impressing on the student the importance of estimating the value of systems and schools of philosophy that, at the end of each chapter, suggestions for criticism are offered under the title "Historical Position." No one is more keenly alive than the author himself to the absurdity of regarding such criticisms as possessing more than a relative value. If they sometimes convey to the reader a sense of intended finality, allowance will perhaps be made for the impossibility of finding, within the limits of a text-book, space for a more ample discussion of questions which are far from being finally and incontrovertibly settled.

The plan of the work precludes much claim to originality. Use has been made of primary sources wherever it was possible to do so. In dealing with Scholastic philosophy, especially, recourse has been had to the works of the schoolmen, experience having abundantly shown the danger of relying on secondary authorities for this period. The frequent mention, both in the text and in the notes, of Zeller's *Philosophie der Griechen*, of Stöckl's *Lehrbuch der Geschichte der Philosophie*, of the *Geschichte der Philosophie des Mittelalters* by the same author, of De Wulf's *Histoire de la philosophie médiévale*, of González' *Historia de la filosofía*, and of Falckenberg's and Höffding's histories of modern philosophy, indicates the principal secondary sources which have been used, but does not represent the full extent of the writer's indebtedness to those works. In revising the manuscript and in reading the proofs use has been made of the *Dictionary of Philosophy and Psychology* edited by Professor J. M. Baldwin.

The writer wishes to acknowledge his indebtedness to the Rev. J. M. Prendergast, S.J., of Holy Cross College, Worcester, to the Rev. J. M. Reardon of the St. Paul Seminary, and to the Rev. T. E. Judge for many helpful suggestions in the course of their revision of some of the proofs. He is, moreover, indebted in a special manner to the Rev. H. Moynihan, S.T.D., of the St. Paul Seminary, for careful and scholarly reading of all the proofs, and to Professor Frank Thilly, Ph.D., of the University of Missouri, whose valuable criticisms and suggestions have been the more appreciated because they come from one whose view point is so different from that of the writer. He gratefully acknowledges also the care and accuracy of the proof readers of the Athenæum Press.

WILLIAM TURNER.

ST. PAUL, April 7, 1903.

CONTENTS

	Page
INTRODUCTION : Definition, Method, Sources, Division of the History of Philosophy	1

PART I ANCIENT PHILOSOPHY

SECTION A — ORIENTAL PHILOSOPHY

Babylonia and Assyria	7
Egypt	9
China	12
India	15
Persia	26

SECTION B — GREEK AND GRECO-ROMAN PHILOSOPHY

FIRST PERIOD — PRE-SOCRATIC PHILOSOPHY

CHAPTER		
I. Earlier Ionian School: Thales, Anaximander, Anaximenes .		34
II. The Pythagorean School		38
III. The Eleatic School: Xenophanes, Parmenides, Zeno, Melissus		44
IV. Later Ionian Philosophers: Heraclitus, Empedocles, Anax- agoras		53
V. The Atomists: Leucippus, Democritus		65
VI. The Sophists: Protagoras, Gorgias, Hippias, Prodicus .		70

SECOND PERIOD — SOCRATES AND THE SOCRATIC SCHOOLS

VII. Socrates	77
VIII. The Imperfectly Socratic Schools: The Megarian School, The Elean School, The Cynics, The Hedonists	84
IX. Plato	93
X. The Platonic Schools: Old, Middle, and New Academies .	121
XI. Aristotle	124
XII. The Peripatetic School	158

THIRD PERIOD — POST-ARISTOTELIAN PHILOSOPHY	
CHAPTER	PAGE
XIII. The Stoics	163
XIV. The Epicureans	175
XV. The Sceptics: Pyrrho, The Middle Academy, The Later Sceptics	184
XVI. The Eclectics	187
XVII. The Scientific Movement	188
XVIII. Philosophy of the Romans: Cicero	189
Character of Greek Philosophy	194

SECTION C — GRECO-ORIENTAL PHILOSOPHY

XIX. Greco-Jewish Philosophy: Aristobulus, Philo	200
XX. Neo-Pythagoreanism and Neo-Platonism	204

PART II

PHILOSOPHY OF THE CHRISTIAN ERA

INTRODUCTION	215
------------------------	-----

SECTION A — PATRISTIC PHILOSOPHY

XXI. Heretical Systems: Gnosticism, Manicheism	218
XXII. Ante-Nicene Fathers: Clement, Origen	220
XXIII. Post-Nicene Fathers: Pseudo-Dionysius, St. John of Damascus, St. Augustine	222

SECTION B — SCHOLASTIC PHILOSOPHY

FIRST PERIOD OF SCHOLASTICISM: ERIGENA TO ROSCELIN

XXIV. First Masters of the Schools: Alcuin, Fredegis, Rhabanus Maurus	244
XXV. John Scotus Erigena	246
XXVI. Gerbert	257
XXVII. The School of Auxerre: Eric, Remi, Author of <i>Glosses</i>	261

SECOND PERIOD OF SCHOLASTICISM: ROSCELIN TO ALEXANDER OF HALES

XXVIII. Predecessors of Roscelin	268
XXIX. Roscelin	269
XXX. St. Anselm	272
XXXI. William of Champeaux, The Indifferentists: Otto of Tournai, Adelard of Bath, Walter of Mortagne	279

CONTENTS

ix

CHAPTER	PAGE
XXXII. Abelard	285
XXXIII. The School of Chartres: Bernard and Theodoric of Chartres, William of Conches, Gilbert de la Porrée	292
XXXIV. Eclectics: John of Salisbury, Peter the Lombard, Alanus of Lille, Gerard of Cremona	299
XXXV. The Mystic School: St. Bernard; Hugh, Richard, and Walter, of St. Victor	302
XXXVI. The Pantheistic School: Bernard of Tours, Amaury of Bène, David of Dinant	306
Byzantine, Arabian, and Jewish Philosophy	310

THIRD PERIOD OF SCHOLASTICISM: ALEXANDER OF HALES TO OCKAM

XXXVII. Predecessors of St. Thomas: Simon of Tournai, Alexander Neckam, Alfred Sereshel, William of Auvergne, Alexander of Hales, John de la Rochelle, St. Bonaventure, Roger Bacon, Albert the Great	324
XXXVIII. St. Thomas of Aquin	343
XXXIX. Thomists and Anti-Thomists	381
XL. Henry of Ghent	384
XLI. John Duns Scotus	387
XLII. Averroism in the Schools: Siger of Brabant, Boetius the Dacian, Bernier of Nivelles, Raymond Lully	393

FOURTH PERIOD OF SCHOLASTICISM: BIRTH OF OCKAM TO TAKING OF CONSTANTINOPLE

XLIII. Predecessors of Ockam: Durandus, Aureolus	400
XLIV. William of Ockam	404
XLV. Followers and Opponents of Ockam: John Buridan, Peter d'Ailly, Raymond of Sabunde, etc.	408
XLVI. The Mystic School: Orthodox Mystics, Heterodox Mystics	411
XLVII. Nicholas of Autrecourt	415
Character of Scholastic Philosophy	417

SECTION C—MODERN PHILOSOPHY

FIRST PERIOD—TRANSITION FROM SCHOLASTIC TO MODERN PHILOSOPHY

XLVIII. Scholastics of the Transition Period: Cajetan, Suarez, etc.	424
XLIX. The Humanists: Pletho, Bessarion, Valla, etc.	425

CHAPTER	PAGE
L. Italian Philosophy of Nature: Cardano, Telesio, Bruno, Campanella	428
LI. The Scientific Movement: Copernicus, Kepler, Galileo, etc.	432
LII. Protestant Mysticism: Luther, Zwingli, Böhme, etc.	438
LIII. Systems of Political Philosophy: Machiavelli, More, Bodin, Hobbes	441
SECOND PERIOD — FROM DESCARTES TO KANT	
LIV. Descartes	447
LV. Cartesianism: Pascal, Geulincx, Malebranche	462
LVI. Spinoza	466
LVII. English Empiricism: Locke, Newton, The Deistic Controversy	486
LVIII. British Moralists	495
LIX. French Empiricism	500
LX. The Idealistic Movement: Leibniz, Berkeley	505
LXI. Pan-Phenomenalism — Hume	518
LXII. German Illumination — Transition to Kant	524
THIRD PERIOD — FROM KANT TO OUR OWN TIME	
LXIII. German Philosophy: Kant	528
LXIV. German Philosophy (continued): The Kantians, The Romantic Movement, Fichte, Schelling	548
LXV. German Philosophy (continued): Hegel, The Hegelians	560
LXVI. German Philosophy (continued): The Reaction against Hegel; Herbart, Schopenhauer	583
LXVII. The Scottish School: Reid, Brown, Stewart, etc.	592
LXVIII. French Philosophy: The Traditionalists, The Eclectics, The Positivists, The Sociologists	602
LXIX. English Philosophy: The Association School, Utilitarianism, Evolution, Idealism	613
LXX. Italian Philosophy: Vico, Galuppi, Rosmini, Gioberti, etc.	630
LXXI. American Philosophy: Edwards, McCosh, Brownson, etc.	634
LXXII. Catholic Philosophy in the Nineteenth Century: The Neo-Scholastic Movement	637
LXXIII. Contemporary Philosophy in Germany, France, England, Italy, America	644
LXXIV. Conclusion	653
INDEX	661

HISTORY OF PHILOSOPHY

INTRODUCTION

THE *History of Philosophy* is the exposition of philosophical opinions and of systems and schools of philosophy. It includes the study of the lives of philosophers, the inquiry into the mutual connection of schools and systems of thought, and the attempt to trace the course of philosophical progress or retrogression.

The nature and scope of philosophy furnish reasons for the study of its history. Philosophy does not confine its investigation to one or to several departments of knowledge; it is concerned with the ultimate principles and laws of all things. Every science has for its aim to find the causes of phenomena; philosophy seeks to discover ultimate causes, thus carrying to a higher plane the unifying process begun in the lower sciences. The vastness of the field of inquiry, the difficulty of synthesizing the results of scientific investigation, and the constantly increasing complexity of these results necessitated the gradual development of philosophy. To each generation and to each individual the problems of philosophy present themselves anew, and the influences, personal, racial, climatic, social, and religious, which bear on the generation or on the individual must be studied in order that the meaning and value of each doctrine and system be understood and appreciated. Such influences are more than a matter of mere erudition; they have their place in the *prænotanda* to the solution of every important question

in philosophy; for, as Coleridge says, "the very fact that any doctrine has been believed by thoughtful men is part of the problem to be solved, is one of the phenomena to be accounted for." Moreover, philosophical doctrines, while they are to be regarded primarily as contributions to truth, are also to be studied as vital forces which have determined to a large extent the literary, artistic, political, and industrial life of the world. To-day, more than ever, it is clearly understood that without a knowledge of these forces it is impossible to comprehend the inner movements of thought which alone explain the outer actions of men and nations.

The dangers to be avoided in the study of the history of philosophy are *Eclecticism*, which teaches that all systems are equally true, and *Scepticism*, which teaches that all systems are equally false. A careful study of the course of philosophical speculation will result in the conviction that, while no single school can lay claim to the entire truth, certain schools of thought have adopted that world-concept which can be most consistently applied to every department of knowledge. False systems of philosophy may stumble on many important truths, but a right concept of the ultimate meaning of reality and a correct notion of philosophic method are the essentials for which we must look in every system; these constitute a legitimate standard of valuation by which the student of the history of philosophy may judge each successive contribution to philosophical science.

The *method* to be followed in this study is the empirical, or *a posteriori*, method, which is employed in all historical research. The speculative, or *a priori*, method consists in laying down a principle, such as the Hegelian principle that the succession of schools and systems corresponds to the succession of logical categories, and deducing from such a principle the actual succession of schools and systems. But, apart from the danger of misstating facts for the sake of methodic symmetry, such a

procedure must be judged to be philosophically unsound ; for systems of philosophy, like facts of general history, are contingent events. There are, indeed, laws of historical development ; but such laws are to be established subsequently, not anteriorly, to the study of the facts of history.

The historian of philosophy, therefore, has for his task : (1) To set forth the lives and doctrines of philosophers and systems and schools of philosophy in their historical relation. This, the *recitative* or *narrative* portion of the historian's task, includes the critical examination of sources. (2) To trace the genetic connection between systems, schools, and doctrines, and to estimate the value of each successive contribution to philosophy. This, the *philosophical* portion of the historian's task, is by far the most important of his duties : *Potius de rebus ipsis judicare debemus, quam pro magno de hominibus quid quisque senserit scire.*¹

The *sources* of the history of philosophy are: (1) *Primary sources*, namely, the works, complete or fragmentary, of philosophers. It is part of the historian's task to establish, whenever necessary, the *authenticity* and *integrity* of these works. (2) *Secondary sources*, that is, the narration or testimony of other persons concerning the lives, opinions, and doctrines of philosophers. In dealing with secondary sources the rules of historical criticism must be applied, in order to determine the *reliability* of witnesses.

The *division* of the history of philosophy will always be more or less arbitrary in matters of detail. This is owing to the continuity of historical development : the stream of human thought flows continuously from one generation to another ; like all human institutions, systems and schools of philosophy never break entirely with the past ; they arise and succeed one another without abrupt transition and merge into one another so imperceptibly that it is rarely possible to decide where one ends and

¹ St. Augustine, *De Civitate Dei*, XIX, 3.

another begins. The more general divisions, however, are determined by great historical events and by obvious national and geographical distinctions. Thus, the coming of Christ divides the History of Philosophy into two parts, each of which may be subdivided as follows :

PART I—ANCIENT OR PRE-CHRISTIAN PHILOSOPHY

SECTION A — ORIENTAL OR PRE-HELLENIC PHILOSOPHY

SECTION B — GREEK AND GRECO-ROMAN PHILOSOPHY

SECTION C — GRECO-ORIENTAL PHILOSOPHY

PART II—PHILOSOPHY OF THE CHRISTIAN ERA

SECTION A — PATRISTIC PHILOSOPHY

SECTION B — SCHOLASTIC PHILOSOPHY

SECTION C — MODERN PHILOSOPHY

General Bibliography. — The following works treat of the History of Philosophy as a whole: Erdmann, *History of Philosophy*, trans. by Hough (3 vols., London, 1890); Ueberweg, *History of Philosophy*, trans. by Morris (2 vols., New York, 1872); Weber, *History of Philosophy*, trans. by Thilly (New York, 1896); Windelband, *History of Philosophy*, trans. by Tufts (second edition, New York, 1901); Stöckl, *Lehrbuch der Geschichte der Philosophie* (2 Bde., 3. Aufl., Mainz, 1888), trans. in part from the second edition by Finlay (Dublin, 1887).

For the history of parts of philosophy, consult Prantl, *Geschichte der Logik im Abendlande* (4 Bde., Leipzig, 1855 ff.); Siebeck, *Geschichte der Psychologie* (Gotha, 1880–1884); Sidgwick, *History of Ethics* (third edition, London, 1892); Bosanquet, *History of Æsthetics* (London, 1892).

Consult also Willmann, *Geschichte des Idealismus* (3 Bde., Braunschweig, 1894–1897), and Lange, *History of Materialism*, trans. by Thomas (3 vols., London, 1878–1881).

For complete bibliography, cf. Weber, *op. cit.*, pp. 13 ff.

PART I
ANCIENT PHILOSOPHY

SECTION A

ORIENTAL PHILOSOPHY

IN the doctrines by means of which the Babylonians, Chinese, Hindus, Egyptians, and other Oriental peoples sought to formulate their thoughts concerning the origin of the universe and the nature and destiny of man, the religious element predominates over the natural or rational explanation. An adequate account of these doctrines belongs, therefore, to the History of Religions rather than to the History of Philosophy. While, however, this is so, and while the task of separating the religious from the philosophical element of thought in the Oriental systems of speculation is by no means easy, some account of these systems must be given before we pass to the study of Western thought.

Sources. The most important collection of primary sources is *The Sacred Books of the East*, edited by Max Müller (Oxford, 1879 ff.). For a complete list of secondary sources and recent studies on the religious systems of the East, consult *Lehrbuch der Religionsgeschichte*, von P. D. Chantepie de la Saussaye, Bd. II (2. Aufl., Freiburg im B., 1897). Consult also Ueberweg, *History of Philosophy*, trans. by Morris (New York, 1872), Vol. I, pp. 15, 16.

BABYLONIA AND ASSYRIA¹

When, probably about the year 3800 B.C., the Semites conquered Babylonia, they found there a civilization which is

¹ For bibliography, cf. De la Saussaye, *Lehrbuch der Religionsgeschichte*, I, 163; cf. also *Manual of the Science of Religion*, by De la Saussaye, trans. by B. Colyer Ferguson (London, 1891), pp. 458 ff. The latter is a translation of the first volume of the first edition of the *Lehrbuch*.

To De la Saussaye's list add Jastrow, *The Religion of Assyria and Babylonia* (Boston, 1898).

commonly called that of the Accadians and Sumerians, and is by many regarded as the source of all the civilizations of the East. The religion of the Accadians was originally Shamanistic : every object, every force in nature, was believed to possess a spirit (*Zi*) who could be controlled by the magical exorcisms of the Shaman, or sorcerer-priest.¹ Gradually certain of these spirits had been elevated to the dignity of gods, as, for instance, *Anu* (the sky), *Mul-ge*, or *Enum* (the earth), and *Hea* (the deep). It was not, however, until the time of Assurbanipal (seventh century B.C.) that this primitive system of theogony began to develop into a system of cosmogony based on the idea that the universe arose out of a chaos of waters. Before that time, there prevailed in Accadia a vague traditional belief that the present cosmic system was preceded by an anarchical chaos in which there existed composite creatures,—men with the bodies of birds and the tails of fishes,—Nature's first attempts at creation. With this creationist legend was associated an equally vague belief in a gloomy Hades, or underworld, where the spirits of the dead hover like bats and feed on dust.

From the earliest times the Accadians devoted attention to the observation of the heavenly bodies, and it may be said that among them Astronomy found its first home. Their crude attempts at astronomical observations were, however, connected with astrological practices, so that the Chaldæans became famous among the ancients as adepts in the magic arts: *Chaldæos ne consulito*. In like manner, the first efforts at numerical computation and notation were made subservient to the demands of the magician.

It was through the Phœnicians, who inaugurated the trade of western Asia, that the civilization of the Assyrians influenced the religious and artistic life of the Greeks and of the other nations of the Mediterranean.

¹ Cf. Sayce, *The Ancient Empires of the East* (New York, 1896), pp. 145 ff.

EGYPT¹

Up to the present time Egyptologists have failed to reach an agreement as to what was the primitive form of religious belief in ancient Egypt. In the first place, the chronological difficulties have hitherto proved to be insurmountable; and in the next place, the diversity of religious systems in the different *nomes*, or provinces, into which ancient Egypt was divided, renders difficult every attempt at forming a theory as to what, if any, was the one religion which prevailed throughout Egypt at the dawn of history. Historians are content with dating the period preceding the seventh century B.C. by dynasties rather than by years, the first dynasty being placed about the fifty-fifth century B.C. Menes, who established the first dynasty, found already existing a hierarchical system of deities, to each of whom some great city was dedicated. But what was the primitive religion of Egypt, from which this hierarchical system of gods was evolved? *Monotheism, Polytheism, Pantheism, Henotheism, Totemism, Sun-Worship, Nature-Worship*,—these are the widely different answers which modern Egyptologists have given to this question.² Scholars are equally at variance as to the origin and significance of *Animal-Worship* among the Egyptians. When, however, we come to the period of the great gods, chief of whom were *Ra* (the sun), *Nut* (heaven), and *Set*, or *Typhon* (the earth), and to the legends of *Osiris, Isis*, and *Horus*, there seems to be very little room for doubt as to the essentially naturalistic character of these divinities. "The kernel of the Egyptian state religion was solar."³

With regard to the *speculative elements* of thought contained in the mythological conceptions of the Egyptians, mention must

¹For bibliography, cf. De la Saussaye, *op. cit.*, I, 88, and the *Manual* above referred to, pp. 374 ff.

²Cf. De la Saussaye, *Manual*, p. 396.

³Sayce, *The Ancient Empires of the East*, p. 58.

be made of the doctrine that everything living, whether it was a god, a man, or an animal, possessed a *Ka*, or "shadow," which was in each case more real and permanent than the object itself. This notion was present in the practice of animal worship; for, although there is by no means a unanimity of opinion among scholars in favor of reducing animal worship to mere symbolism, there is no doubt that the Egyptian mind was dominated by the idea that every *Ka* must have a material dwelling place. Similarly, when the abstract notion of the divinity presented itself to the Egyptian mind and was identified with each god in turn, and when, at a later time, there appeared the notion of a pantheistic divinity in whom all the great gods were merged, the dominant idea was always that of the *Ka* or soul, whose dwelling place was the individual god or the universe. Another conception which may be traced very far back in the history of Egyptian civilization is that of *the magical virtue of names*.

The idea of "shadow" and the belief in the magical virtue of names determined the Egyptian *cult of the dead* and the *doctrine of immortality*. From the monuments and the relics of ancient Egyptian literature, especially from the *Book of the Dead*,¹ it is clear that deep down in the popular mind was the belief that the continued existence of a person after death depended somehow on the preservation of his name and on the permanence of the dwelling place which was to harbor his *Ka*, or shadow. Hence, the Egyptians considered that the houses of the living were merely inns, and that the tombs of the dead are eternal habitations. In the philosophical traditions of the priestly caste there grew up a more rational doctrine of the future life. According to this doctrine, man consists of three parts, the *Khat*, or body, the *Khu*, or spirit, which is an emanation from the divine essence, and the soul, which is sometimes represented as a *Ka* dwelling in the mummy or in the statue of the deceased,

¹ For texts, date, etc., cf. Wiedemann, *Religion of the Ancient Egyptians* (New York, 1897), p. 244.

and sometimes as a *Ba*, or disembodied soul, which ultimately returns to its home in the lower world.¹ It is this *Ba*, or disembodied soul, which after death appears before Osiris and the forty-two judges, and is weighed in the balance by Horus and Anubis while Thoth records the result. The souls of the blessed are eventually admitted to the happy fields of Aalu, there to be purified from all earthly stain and made more perfect in wisdom and goodness. The souls of the wicked are condemned either to the various torments of hell, or to wanderings long and arduous through the regions between heaven and earth, or to transmigration into the bodies of various animals, or, finally, to annihilation. The fate of the soul is determined partly by the good and evil which it wrought during life and partly by the amulets, prayers, and gifts by which it secured the favor of the gods. But whatever may be the immediate fate of the soul, it will ultimately return to its body, and on the great day of resurrection soul, body, and spirit shall be once more united.

From the chapter on Judgment in the *Book of the Dead* and from the *Ethical Maxims* of *Kakimma* (third dynasty) and *Ptah-hotep* (fifth dynasty) it appears that the ideal of conduct among the ancient Egyptians was practical, of a high order of purity, and essentially religious. In these documents charity, benevolence, prudence, chastity, social justice, clemency, and the love of intellectual pursuits are ranked among the foremost virtues. And not only external morality is inculcated but also the morality of thought and desire.

¹ Mention is also made of *Osiris*, or that part of man's immortal nature which has such close resemblance to the god Osiris as to be called by his name. Wiedemann (*op. cit.*, p. 244) maintains that in the different designations, *Ka*, etc., we have to do with different conceptions of an immortal soul, which had arisen in separate places in prehistoric times and were ultimately combined into one doctrine, "the Egyptians not daring to set any aside for fear it should prove to be the true one."

CHINA¹

When, about 2000 years B.C., the Chinese first appeared in the light of history, they already possessed social, political, and religious institutions and a material and intellectual civilization of a high order. It was not, however, until the sixth century B.C. that the sacred books were collected and arranged, although some of them, especially the *Y-king*, were assigned by tradition to the learned princes and kings who, long before the historical period, had invented the art of writing. The sacred or authoritative books were:

I. The *Five Classics*, namely, the *Y-king*, or Book of Changes (divination); the *Shu-king*, or Book of History; the *Shi-king*, or Book of Poetry; the *Le-ke*, or Record of Rites; and the *Chun-tsew*, Spring and Autumn, a Book of Annals, composed by Confucius.

II. The *Four Books*, namely, *Lun-yu*, or Conversations of the Master; *Chun-yung*, or Doctrine of the Mean; *Ta-heo*, or Great Learning; and *Meng-tse*, or Teachings of Mencius.

The Five Classics were collected, arranged, and edited by Confucius (with the exception of the last, which was written by him), and it is impossible to say to what extent the editor introduced into the text doctrines and opinions of his own. The Four Books were composed by disciples of Confucius.

Before the time of Confucius there existed a national or state religion in which the principal objects of worship were *heaven*, and *spirits* of various kinds, especially the *spirits of dead ancestors*. Heaven (*Thian*) is the supreme lord (*Shang-ti*), the highest object of worship.² The deity carries on its work

¹ Cf. translations of Chinese Classics by Dr. Legge, in *Sacred Books of the East*, Vols. III, XVI, XXVII, XXVIII. For bibliography, cf. De la Saussaye, *Lehrbuch*, I, 50. Consult also R. K. Douglas, *Confucianism and Taoism* (London, 1879).

² According to Mgr. De Harlez, "there is every reason for affirming that *Shang-ti* is not identical with Heaven, is not Heaven animized, but a personal being, the supreme Spirit governing the world from the height of the empyrean." *New World* (December, 1893), Vol. II, p. 652.

silently and simply, yet inexorably, in the order and succession of natural phenomena, in the rain and the sunshine, the heat and the cold, etc. With this natural order are closely connected the social, political, and moral orders of the world; or rather, all order is essentially one, and perfection and prosperity in moral life and in the state depend on maintaining the order which is not only heaven's first law, but heaven itself. With the worship of heaven was connected the worship of spirits (*Shan*). These are omnipresent throughout nature; they are not, however, addressed as individuals, but as a body or aggregation of individuals, as, for example, celestial spirits, terrestrial spirits, and ancestral spirits. The last are the object of private as distinct from official worship. The Chinese, always inclined to look towards the past rather than towards the future, thought less of personal immortality in the life after death than of the continuation of the family life by which the actions of the individual were reflected back and made to ennoble a whole line of ancestors.

The qualities which characterized the religious thought of China from the beginning — its eminently practical nature, the complete absence of speculation, and the almost complete exclusion of mythological elements — reappear in the writings of the great religious teacher Confucius (*Kong-tse*, 551–478 B.C.). Confucius was no innovator; he appeared, rather, as the collector of the sacred literature of the past and the restorer of the old order. He inculcated the strict observance of the traditional forms of worship, discouraged speculation in matters theological, and while he taught the supreme importance of moral duties, he grounded all his moral precepts on the general order of the world and the long-established tradition of the Chinese people. He insisted on man's political and domestic duties and emphasized especially the importance of *filial piety*.

Lao-tse, a contemporary of Confucius (born about 604 B.C.), and author of the *Tao-te-king*, introduced into China the first

system of speculative thought, the philosophy of *Tao* (Reason, Way), which many scholars consider to be of Hindu origin.¹ Lao-tse did not, however, attempt to overthrow the traditional ideals of his countrymen, and, while the importance which he attaches to speculation places him in sharp contrast with Confucius, the doctrines of the two great teachers have many points in common. For *Tao*, the fundamental concept of the *Tao-te-king*, does not mean Reason in the abstract, but Nature, or rather, the *Way*, — the order of the world, the impersonal method which all men must observe if they are to attain goodness and success. Ultimately, then, both Lao-tse and Confucius teach that conduct is to be guided by a knowledge of the unalterable, discriminating, intelligent order of heaven and earth; but while Confucius refers his disciples to the study of the writings and institutions of antiquity, Lao-tse refers them to the speculative contemplation of *Tao*: the former encourages study, the latter advocates contemplation, as a means of acquiring a knowledge of the eternal order on which morality depends. Hence, the tendency of Taoism towards quietism and self-abnegation. "Recompense injury with kindness," said Lao-tse; to which Confucius is said to have answered, "Recompense kindness with kindness, but recompense injury with justice."

To the fifth century B.C. belong **Yang-tse** and **Mih-tse** (or **Mak**). The former preached a kind of Epicureanism: man should enjoy the present and cheerfully accept death when it comes; virtue is but a name; good reputation is a shadow; the sacrifice of self is a delusion. The latter maintained that one should love all men equally, that the practice of universal love is a greater benefit to the state than the study of antiquity and the preservation of ancient customs.²

Lih-tse and **Chwang-tse** appeared during the fifth and the first half of the fourth centuries B.C. as representatives of Taoism.

¹ Cf. Douglas, *op. cit.*, p. 219.

² Cf. De la Saussaye, *Manual*, p. 367.

They were opposed by the distinguished exponent of Confucianism, **Meng-tse** or Mencius (371–288). In his dialogues, which were collected in seven books by his disciples, he gives a more compact exposition of Confucianism than that found in the isolated sayings of the master. He insists on filial piety, on political virtue, and on the proper observance of religious and other ceremonial rites. He reduces the cardinal virtues to four: *Wisdom, Humanity, Justice, and Propriety*.

INDIA ¹

The *Veda*, or collection of primitive religious literature of the Hindus, consists of books of sacred hymns, the *Rig-Veda*, the *Sâma-Veda*, the *Yagur-Veda*, and the *Atharva-Veda*. In each it is usual to distinguish the *Mantras*, or hymns, the *Brâhmanas*, or ritualistic commentaries, and the *Upanishads*, or philosophical commentaries.²

The Vedic hymns, which are the oldest portion of the Veda (1500 B.C. being the date to which conservative scholars assign the earliest of them), consist of songs of praise and prayer directed to *Agni* (fire), *Soma* (the life-awakening, intoxicating juice of the soma-plant), *Indra* (the god of the wars of the elements, of thunder and rain), *Varuna* (the great, serene, all-embracing heaven), and other deities, all of whom possess more or less definitely the twofold character of gods of nature and gods of sacrifice. The gods of the Vedic hymns are styled *Devas* (shining divinities) and *Asuras* (lords). There is, in the poems, no evidence of a sustained attempt to trace the genealogy of these deities or to account by means of mythological concepts for the origin of the universe.

¹ For bibliography, cf. De la Saussaye, *Lehrbuch*, II, 4, and *Manual*, p. 497. Consult Max Müller, *The Six Systems of Indian Philosophy* (London, 1899), and Deussen, *Das System des Vedanta* (1883), and *Allg. Gesch. der Philosophie* (1899).

² Cf. Hopkins, *The Religions of India* (Boston, 1898), pp. 7 ff.

In the *Brāhmanas*, or ritualistic commentaries, appears the concept of a god distinct from the elemental deities, a personification of the act of sacrifice, — *Brahmanaspati*. From this concept the monotheistic and pantheistic speculation of the Hindus may be said to have started, although it is undeniable that even in the hymns there is expressed at least “a yearning after one supreme deity, who made the heaven and the earth, the sea and all that in them is,” — a yearning to which expression was given in the name *Pragâpati* (the lord of all creatures), applied successively to Soma and other divinities. Of more importance, however, than the name *Pragâpati* is the expression *Tad Ekam* (that One) which occurs in the poems as the name of the Supreme Being, of the First Origin of all things. Its neuter form indicates, according to Max Müller, a transition from the mythological to the metaphysical stage of speculation. With regard to the word *Brahman* which succeeded *Tad Ekam* as the name of the Supreme One, Max Müller refers it to the root *brih* (to grow) and asserts that while the word undoubtedly meant prayer, it originally meant “that which breaks forth.” It “was used as a name of that universal force which manifests itself in the creation of a visible universe.”¹ The word *Âtman*, which was also a name of the deity, is referred by the same distinguished scholar to the root *âtma* (breath, life, soul) and is translated as *Self*. There grew up, he says, in the hymns and *Brāhmanas* of the Veda the three words *Pragâpati*, *Brahman*, and *Âtman*, “each of which by itself represents *in nuce* a whole philosophy, or a view of the world. A belief in *Pragâpati*, as a personal god, was the beginning of monotheistic religion in India, while the recognition of *Brahman* and *Âtman*, as one, constituted the foundation of all the monistic philosophy of that country.”²

In the *Upanishads*, or speculative commentaries, we find the first elaborate attempts made by India to formulate a speculative

¹ *Six Systems*, p. 60.

² *Op. cit.*, pp. 95, 96.

system of the universe and to solve in terms of philosophy the problems of the origin of the universe and of the nature and destiny of man. It must, however, be remembered that probably until the fourth century B.C. the Upanishads, in common with the other portions of the Veda, did not exist in writing, being handed down from one generation to another by oral tradition. The *Sûtras*, or aphorisms, therefore, which we possess of the six systems of Indian philosophy do not represent the first attempts at philosophical speculation. The men whose names are associated with these *Sûtras*, and are used to designate the six systems, are not, in any true sense, the founders of schools of philosophy: they are merely final editors or redactors of the *Sûtras* belonging to different philosophical sects, which, in the midst of a variety of theories, and in a maze of speculative opinions, retained their individuality during an inconceivably long period of time.

Before we take up the separate study of the six systems of philosophy it will be necessary to outline the general teaching of the Upanishads. This teaching belongs to no school in particular, although each of the six schools is connected with it in more than one point of doctrine. The Upanishads teach:

1. *The identity of all being in Brahman*, the Source, or *Âtman*, the Self, which is identical with Brahman.

2. *The existence of māyā* (illusion), to which is referred everything which is not Brahman.

3. The worthlessness of all knowledge of things in their isolated existence, and the incomparable excellence of the *knowledge of all things in Brahman or Âtman*. This latter, the only true knowledge, is difficult of attainment; still it is attainable even in this life. It is this knowledge which constitutes the happiness of man by uniting him with *Âtman*. "In the bee's honey one can no longer recognize the taste of the single flowers; the rivers which emanate from the one sea and again return to it lose meanwhile their separate existences;

a lump of salt dissolved in water salts the whole water and cannot be grasped again : so the true being can nowhere be grasped. It is a subtle essence which lies at the foundation of all phenomena, which are merely illusions, and is again identical with the *ego*.”¹

4. *The immortality of the soul*. “The idea,” writes Max Müller, “of the soul ever coming to an end is so strange to the Indian mind that there seemed to be no necessity for anything like proofs of immortality, so common in European philosophy.”² Equally self-evident to the Hindu mind was the *samsāra*, or transmigration of the soul. In some systems, however, as we shall see, it is the subtle body which migrates, while, during the process of migration, the soul, in the sense of self, retaining its complete identity, remains as an onlooker.

With the idea of immortality is associated that of the eternity of *karman* (deed), namely, the continuous working of every thought, word, and deed through all ages. If a man were, once in a thousand years, to pass his silken handkerchief across the Himalayan mountains and thus at last succeed in wiping them out, the world would, indeed, be older at the end of such a long space of time, but eternity and reality would still be young, and the deed of to-day would still exist in its results. At a late period in the development of Vedic speculation the immensity of the duration of Brahman was given popular expression in the doctrine of *kalpas* (æons), or periods of reabsorption (*pralaya*) and creation.

5. *Mysticism and deliverance from bondage*. All the Indian systems of philosophy recognize the existence of evil and suffering and concern themselves with the problem of deliverance by means of knowledge. From the rise of Buddhism (fifth century B.C.) date a clearer perception of the reality of suffering and a more emphatic assertion of the

¹ De la Saussaye, *Manual*, p. 538; cf. *Khandogya Upanishad*, trans. in *S.B.E.*, Vol. I, pp. 92 ff.

² *Op. cit.*, p. 143.

importance of freeing the soul from the bondage which suffering imposes. It is to be remarked that, even in the Upanishads, existence is referred to as an evil, transmigration is represented as something to be avoided, and the final goal of human endeavor is proclaimed to be a union with Âtman, in which all individual existence is merged in the general Self, and individual consciousness is quite extinguished.

Turning now to the six great historical systems of Indian philosophy, we meet at the very outset the vexed question of chronological order. Many of the Sûtras, or aphorisms, in which these systems are formulated are of very great antiquity, ranking with the Upanishads in point of age. Besides, the authors of these Sûtras are more or less vaguely historical or altogether mythical persons. It is hopeless, therefore, to attempt to arrange the systems in chronological order. The order followed will represent rather the fidelity with which the systems (all of which were considered orthodox) adhere to the doctrines described as the common teaching of the Upanishads.

I. The *Vedânta*, or *Uttara-Mimâmsâ*,¹ is first in importance among the systematic expositions of the philosophical teachings of the Upanishads. It is contained in Sûtras composed by **Bâdarâyana**, who is sometimes identified with **Vyâsa**, the author of the *Mahâbhârata* (one of the great epics of India), and in commentaries composed by **Samkara** (about A.D. 900).

The fundamental doctrines of the Vedânta are those of the Upanishads. The Vedânta insists on the monistic concept of reality: "In one half verse I shall tell you what has been taught in thousands of volumes: Brahman is true, the world

¹ *Mimâmsâ* means *investigation*. The *Uttara-Mimâmsâ* (*later investigation*) is so called because it is regarded by the Hindus as later than the *Pârva-Mimâmsâ*, or *prior investigation*. The designations are maintained even by those who do not admit the posteriority of date, since the *Pârva-Mimâmsâ* refers to the first, or practical, while the *Uttara-Mimâmsâ* refers to the second, or speculative, portion of the Veda.

is false, the soul is Brahman and nothing else." "There is nothing worth gaining, there is nothing worth enjoying, there is nothing worth knowing but Brahman alone, for he who knows Brahman is Brahman."¹ More emphatically still is the unity of all being in Brahman asserted in the famous words *Tat tvam asi* (Thou art that), which Max Müller styles "the boldest and truest synthesis in the whole history of philosophy." But, if the individual is Brahman, how are we to account for the manifold "thous" and for the variety of individuals in the objective world? The *Vedānta-Sūtras* answer that the view of the world as composed of manifold individuals is not knowledge but *nescience*, which the Vedānta philosophy aims at expelling from the mind. This nescience (*avidyā*) is inborn in human nature, and it is only when it is expelled that the mind perceives Brahman to be the only reality. Samkara, the commentator, admits, however, that the phenomenal world, the whole objective world as distinct from the subject (*Brahman*), while it is the result of nescience, is nevertheless real for all practical purposes. Moreover, it is clear that phenomena, since they are Brahman, are real: only the multiplicity and distinction of phenomena are unreal (*māyā*).

With regard to the *origin of the universe*: the universe, since it is Brahman, cannot be said to originate. And yet Brahman is commonly represented as the cause of the universe. The Hindus, however, regarded cause and effect as merely two aspects of the same reality: the threads, they observed, are the cause of the cloth, yet what is the cloth but the aggregate of threads?²

Since the finiteness and individual distinctions of things are due to nescience, it is clear that the road to true *freedom* (*moksha*) from the conditions of finite existence is the way of knowledge. The knowledge of the identity of Âtman with

¹ Quoted by Max Müller, *Six Systems*, pp. 159, 160.

² Cf. *Vedānta-Sūtras*, II, 1, 15; *S.B.E.*, XXXIV, p. 331.

Brahman, of Self with God, is true freedom and implies exemption from birth and transmigration. For, when death comes, he who, although he has fulfilled all his religious duties, shall have failed to attain the highest knowledge, shall be condemned to another round of existence. The subtle body, in which his soul (*âtman*) is clothed, shall wander through mist and cloud and darkness to the moon and thence shall be sent back to earth. But he who shall have attained perfect knowledge of Brahman shall finally become identified with Brahman, sharing in all the powers of Brahman except those of creating and ruling the universe. Partial freedom from finite conditions is, even in this life, a reward of perfect knowledge. The Vedântists, however, did not neglect the inculcation of moral excellence; for knowledge, they taught, is not to be attained except by discipline.

II. The *Pârva-Mîmâmsâ* is a system of practical philosophy and is contained in twelve books of Sûtras attributed to Gaimini. Here the central idea is that of *duty* (*Dharma*), which includes sacrificial observances and rests ultimately on the superhuman authority of the Veda.

III. The *Sâmkhya philosophy* may be described as a toning down of the extreme monism of the Vedânta. It is contained in the *Sâmkhya-Sûtras* or *Kapila-Sûtras*. These, at least in their present form, date from the fourteenth century after Christ, although the sage, **Kapila**, to whom they are ascribed lived certainly before the second century B.C. Of greater antiquity than the Sûtras are the *Sâmkhya-Kârikâs*, or memorial verses, in which the philosophy of Kapila was epitomized as early as the first century B.C. A still older and more concise compilation of the Sâmkhya philosophy is found in the *Tattva-Samâsa*, which reduces all truth to twenty-five topics. This latter compendium is taken by Max Müller as the basis of his exposition of the teachings of Kapila.¹

¹ *Six Systems*, pp. 318 ff.

The Sâmkhya philosophy is essentially dualistic. It does not, like the Vedânta, assume that the objective world, as distinct from Brahman, is mere illusion or ignorance ; it accepts the objective world as real and calls it *prakriti*, or *nature* in the sense of matter-containing-the-possibilities-of-all-things. This principle is of itself lifeless and unconscious, and rises into life and consciousness only when contemplated by the *soul* (*purusha*). What we call creation is, therefore, the temporary union of nature with soul, — a union which arises from a lack of discrimination. How then is the soul to be freed from the bondage of finite existence? This is for the Sâmkhya, as it was for the Vedânta, the chief problem of practical philosophy. But, while the Vedânta found deliverance in the recognition of the identity of the soul with Brahman, the Sâmkhya finds it in the recognition of the difference between the soul and nature. This recognition confers freedom ; for nature, once it is recognized by the soul as distinct, disappears together with all limitation and suffering : “*Prakriti*, once recognized by *Purusha*, withdraws itself so as not to expose itself for a second time to the danger of this glance.” The assertion of the individuality of the soul as opposed to nature implies the multiplicity of souls. And this is another point of contrast between the Vedânta and the Sâmkhya : the former asserted the oneness of Âtman ; the latter affirms the plurality of *purushas*.

IV. The *Yoga philosophy* is contained in the Sûtras ascribed to Patañgali, who is supposed to have lived during the second century B.C. In these Sûtras we find practically all the metaphysical principles of the Sâmkhya and, in addition, certain doctrines in which the theistic element is insisted upon. Kapila had denied the possibility of proving the existence of *Îsvara*, the personal creator and ruler : Patañgali insists on the possibility of such proof. Of course, *Îsvara* is not conceived as creator in our sense of the word, but merely as the highest of the *purushas*, all of which may be said to create inasmuch

as they, by contemplating nature, cause nature to be productive. Among the means of deliverance practised by the Yogins were the observance of certain postures, meditation, and the repetition of the sacred syllable *Om*.

V. The *Nyâya philosophy* is contained in the *Nyâya-Sûtras*. The founder of the system was **Gotama**, or Gautama. According to this system, the supreme resignation, or freedom, in which man's highest happiness consists, is to be attained by a knowledge of the sixteen great topics of Nyâya philosophy. These topics (*padârthas*) are means of knowledge, objects of knowledge, doubt, purpose, instance, established truth, premises, reasoning, conclusion, argumentation, sophistry, wrangling, fallacies, quibbles, false analogies, and unfitness for arguing. Taking up now the first of these, namely, the means of knowledge, we find that there are, according to the Nyâya philosophy, four kinds of right perception: sensuous, inferential, comparative, and authoritative. In order to arrive at inferential knowledge (*anumāna*), we must possess what is called *vyāpti*, or *pervasion*, that is to say, a principle expressing invariable concomitance. So, for example, if we wish to infer that "this mountain is on fire," we must possess the principle that smoke is *pervaded* by, or invariably connected with, fire. Once in possession of this principle, we have merely to find an instance, as, "this mountain smokes," whence we immediately infer that "it has fire." But, while this is the comparatively simple means of *acquiring* inferential knowledge, we cannot *impart* this knowledge to others except by the more complicated process including: (1) *Assertion*, "The mountain has fire"; (2) *Reason*, "Because it smokes"; (3) *Instance*, "Look at the kitchen fire"; (4) *Application*, "So too the mountain has smoke"; and (5) *Conclusion*, "Therefore it has fire." The process, in both cases, bears a close resemblance to the syllogism of Aristotelian logic; and it is by reason of the prominence given to this means of knowledge that the Nyâya philosophy came to be regarded as a system of logic. Yet the

Nyāya philosophy is far from being merely a systematic treatment of the laws of thought; for the syllogism is but one of the many means by which the soul or self (*Ātman*) is to attain true freedom, a state in which all false knowledge and all inferior knowledge shall disappear, and all individual desire and personal love and hatred shall be extinguished.

VI. The *Vaisheshika philosophy*, founded by **Kanāda**, is contained in the *Vaisheshika-Sūtras*, which, according to Max Müller, date from the sixth century of the Christian era, although the Vaisheshika philosophy was known in the first century B.C. The system is closely related to the Nyāya philosophy, even its most characteristic doctrine, that of atomism, being found in undeveloped form in the philosophy of Gotama.¹ Here, as in the Nyāya, supreme happiness is to be attained by the knowledge of certain *padārthas*, or quasi-categories, namely: substance, quality, action (*karman*), genus or community, species or particularity, inhesion or inseparability, and (according to some) privation or negation. The substances are earth, water, light, air, ether, time, space, self (*ātman*), and mind (*manas*). The qualities are color, taste, number, etc. These are called *gūnas*, a word which occurs in the Upanishads and is a common term in all the six systems.

The four substances, earth, air, water, and light, exist either in the aggregate material state or in the state of atoms (*anus*). The single atom is indivisible and indestructible; its existence is proved by the impossibility of division *ad infinitum*. Single atoms combine first in twos and afterwards in groups of three double atoms; it is only in such combinations that matter becomes visible and liable to destruction.

To these six great historical systems, which were orthodox in so far as they recognized the supreme authority of the Veda, were opposed the heterodox systems of the heretics (*Nāstikas*) who, like the Buddhists, the Jainas, and the Materialists, rejected the divine authority of the sacred writings.

¹ *Nyāya-Sūtras*, IV, 2; cf. *Six Systems*, p. 584.

Buddhism, as is well known, was a distinctively religious system : it recognized suffering as the supreme reality in life, and devoted little or no attention to questions of philosophic interest, except in their relation to problems of conduct. "To cease from all wrong-doing, to get virtue, to cleanse one's own heart," — this, according to the celebrated verse, "is the religion of the Buddhas."¹ The four truths on which Buddhism is built are : (1) that suffering is universal ; (2) that the cause of suffering is desire ; (3) that the abolition of desire is the only deliverance from suffering ; and (4) that the way of salvation is by means of certain practices of meditation and active discipline. In connection with the second and third of these truths arises the problem of the meaning of *karma* and *nirvāna*. In the Upanishad speculations *karman*, as we have seen, meant *deed*, and its eternity meant the continuous working of every thought, word, and work throughout all ages. In Buddhistic speculation the substantial permanence and identity of the soul are denied, and the only bond between the *skandhas*, or sets of qualities, which succeed each other in the individual body and soul, is the *karma*, the result of what man is and does in one existence or at one time being inevitably continued into all subsequent existences and times. The body is constantly changing, the qualities or states of the soul are constantly replaced by other qualities and states ; but the result of what a man is and does remains, — that alone is permanent. With regard to *nirvāna*, modern scholars are not agreed as to whether it meant total annihilation or a state of painlessness in which positive existence is preserved. Max Müller and Rhys-Davids may be cited in favor of the latter interpretation.² Rhys-Davids defines *nirvāna* as "the extinction of that sinful, grasping condition of

¹ Quoted by Rhys-Davids, *Buddhism* (London, 1894), p. 62.

² Cf. Max Müller, *Buddhaghosha's Parables*, p. xli ; Rhys-Davids, *op. cit.*, p. 111. Max Müller, however, admits that in a later and purely philosophical signification *nirvāna* meant complete annihilation. Cf. *Six Systems*, p. 489.

mind and heart, which would otherwise, according to the mystery of Karma, be the cause of renewed individual existence."

Jainism, like Buddhism, was a religious system. The only important speculative doctrine in which it differs from Buddhism is that of the *substantial reality and permanence of the soul*. Accordingly, the Jainas taught that *nirvāṇa* is the freedom of the soul from the conditions which cause finiteness, suffering, and ignorance. In this respect they approach very closely to the speculation of the Upanishads.

PERSIA ¹

The religion of ancient Persia and that of ancient India sprang from the same origin, namely, the ideas and usages which were shared alike by the Iranian and the Hindu branches of the original Aryan family. There are, indeed, traces of a civilization which existed in Persia prior to the Aryan invasion, and which closely resembled the Shamanism of the Accadians of ancient Chaldea. Little, however, is known of pre-Aryan Persia. All that can be said with certainty is that the Aryan invaders found already existing in Bactria and the neighboring regions a system of polytheism, which they replaced by a religion monotheistic in its tendency and similar in many respects to the religion of the Hindus of the Vedic period. The heaven god, known in India as *Varuna*, became the principal deity of the Iranians. *Soma* was also worshiped under the title *Homa*, and the distinction between *Devas* and *Asuras* ("shining ones" and "lords") was employed in Persia as well as in India to designate two important classes of divinities. Gradually, however, a change was introduced: a tendency towards dualism became more and more strongly marked; the *Devas* came to be recognized

¹ For bibliography, cf. De la Saussaye, *Lehrbuch*, II, 151. For original sources, cf. *S.B.E.*, Vols. IV, XXIII, XXXI. Consult *Catholic University Bulletin* (July, 1897), Vol. III, pp. 243 ff.

as evil deities, and the *Ahuras* (transliteration of *Asuras*) came to be looked upon as divinities friendly to man. "The conflict between these opposites assumed a moral form in the minds of the Iranian wanderers; the struggle between night and day, between the storm and the blue sky, of which the Vedic poets sang, was transformed into a struggle between good and evil. In place of the careless nature worshipers of the Panjab, a race of stern and earnest Puritans grew up among the deserts and rugged mountains of Ariana."¹

This dualistic conception of the universe, this antithesis between good and evil, was already in possession when *Zoroaster*, or *Zarathustra*, the great religious reformer, appeared, about the middle of the seventh or the beginning of the sixth century B.C.² To him, according to Parsee tradition, is to be ascribed the inspired authorship of a portion, at least, of the *Avesta*, or sacred literature of the Persians. This collection consists of five *Gathas*, or hymns, written in an older dialect than that of the rest of the collection, the *Vendidad*, or compilation of religious laws and mythical tales, and the *Zend*, or commentary. The first two portions constitute the *Avesta* proper, that is to say, "law" or "knowledge." In addition to the *Avesta-Zend*, there existed the *Khorda Avesta*, or Small *Avesta*, which was a collection of prayers. Zoroaster's share in the composition of these books is a matter which it is impossible, in the present condition of our knowledge, to determine. It is, however, beyond dispute that the sacred literature of the Persians reflects the beliefs which existed before the time of Zoroaster as well as those which Zoroaster introduced.

The religious reform effected by Zoroaster consisted in reducing to two more or less vague principles the good and evil

¹ Sayce, *The Ancient Empires of the East*, p. 257.

² For the date of Zoroaster and the question of his historical reality, cf. Jackson, *Zoroaster, the Prophet of Ancient Iran* (London and New York, 1899), pp. 3 and 14, and Appendixes I and II.

elements in the universe. For him, as for his ancestors, the world is a vast battlefield, in which the forces of good and evil meet in a mighty conflict. But, instead of representing the contending forces as independent principles, manifold, yet capable of being classified as good and evil, he reduces all the conflicting powers to two, the good and the evil, of which the individual forces are derivatives. The *good principle* is called *Ahura-mazda* (*Ormuzd*, or *Ormazd*), and the *evil principle* is called *Aura-mainyu* (*Ahrimân*). The former is conceived as light and day, the latter as darkness and night. From the former proceed the *Ahuras*, or living lords (who were afterwards called *Yazatas*, or angels), and in general all that is good and beneficial to man: from the latter proceed the *Devas*, who opposed the Ahuras in the original conflict between day and night and who became the "demons" of latter Mazdeism, and, in general, from Ahrimân comes all that is evil and injurious to man.

It is man's duty to worship Ormazd (fire, being the sacred symbol, is also to be honored) by prayer, sacrifice, and the oblation of Homa (the juice of the sacred plant). It is also his duty to cultivate the soil and in other ways to promote the life and growth of the creatures of Ormazd, to destroy the works of Ahrimân, to kill all venomous and noxious things, and to rid the earth of all creatures injurious to man.

At the end of twelve thousand years the present cosmic period will come to an end. Ormazd will finally triumph, for, although Ahrimân is not inferior in power to Ormazd, he fights blindly and without adequate knowledge of the results of his actions; therefore, he and his works will come to an end, and, after the final struggle, storm and night will cease, calm and sunshine will reign, and all will be absorbed in Ormazd. In this universal absorption in Ormazd the human soul will be included.

Mazdeism (the religion of Ormazd) in its later development attached great importance to the worship of Mithra, the sun god.

In this form it appeared in Rome and was among the first of the Oriental religions to gain ascendancy over the minds of the Romans. Zoroastrianism was introduced as a heresy into the Christian Church by Manes, the founder of the Manichean sect.

Retrospect. In the systems of thought which flourished among the great historical nations of the East, there is, as has been observed, an almost complete lack of the rational element. In some of them, however, and especially in the Indian systems, there is abundance of speculation. Living in a country where there was practically no struggle for life, where the means of subsistence were produced without much effort on the part of the tillers of the soil, and where for thousands of years war was unknown save the war of extermination waged against the original dwellers in the land, the Hindus gave themselves up unreservedly to the solution of the problems, Whence are we come? Whereby do we live? and Whither do we go? In solving these problems, however, the Hindus, while they succeeded better than other Oriental peoples in separating the speculative from the mythological, failed to develop the rational or dialectical phase of thought. Their speculative systems are positive rather than argumentative. It was in Greece that philosophy as a dialectical, argumentative science found its first home.

There can be no doubt that the systems which have just been sketched exercised some, if only an indefinite, influence on the speculative efforts of the first philosophers of Greece. The geographical contiguity and the commercial intercourse of the Hellenic colonies with the countries of the interior of Asia render such a supposition probable. It was not, however, until Greek philosophy had run its practically independent course of national development, that the religious systems of the Orient were finally united with the great current of Greek thought, the East and the West pouring their distinctive contributions into the common stream of Greco-Oriental theosophy.

SECTION B

GREEK AND GRECO-ROMAN PHILOSOPHY

Origin. Greek philosophy first appeared in the Ionic colonies of Asia Minor, and never throughout the course of its development did it wholly lose the marks of its Oriental origin. Whether this influence was as preponderant as Röth and Gladisch contend,¹ or as unimportant as Zeller and others maintain,² it is certain that the philosophy of Greece was characterized from the beginning by a spirit which is peculiarly Hellenic. The Greek looked out upon the world through an atmosphere singularly free from the mist of allegory and myth: the contrast between the philosophy of the East and the first attempts of the Ionian physicists is as striking as the difference between an Indian jungle and the sunny, breeze-swept shores of the Mediterranean.

Greek Religion exercised hardly more than an indirect influence on Greek philosophy. Popular beliefs were so crude as to their speculative content that they could not long retain their hold on the mind of the philosopher. Consequently, such influence as they directly exercised was antagonistic to philosophy. Yet it was the popular beliefs which, by keeping alive among the Greeks an exquisite appreciation of form and an abiding sense of symmetry, did not permit the philosopher to take a partial or an isolated view of things. In this way Greek religion indirectly fostered that imperative desire for a totality of view which, in the best days of Greek speculation, enabled

¹ Cf. Zeller, *Pre-Socratic Philosophy*, Vol. I, pp. 35 ff.

² Cf. *ibid.*

Greek philosophy to attain its most important results. In one particular instance Greek religion contributed directly to Greek philosophy by handing over to philosophy the doctrine of immortality,—a doctrine which in every stage of its philosophical development has retained the mark of its theological origin. Plato, for example, distinctly refers it to the (Bacchic and Orphic) mysteries.¹

Poetry. The philosophy as well as the religion of the Greeks found its first expression in poetry, philosophical speculation, properly so called, being preceded by the effort of the imagination to picture to itself the origin and the evolution of the universe. **Homer** presents, without analyzing, types of ethical character: Achilles, the indomitable; Hector, the chivalrous; Agamemnon, of kingly presence; Nestor, the wise; Ulysses, the wary; Penelope, the faithful. **Hesiod** gives us the first crude attempts at constructing a world-system. His cosmogony, however, is presented in the form of a theogony; there is as yet no question of accounting for the origin of things by natural causes. The so-called **Orphic Cosmogonies** had the Hesiodic theogony for their basis. They did not advance much farther in their inquiry than Hesiod himself had gone, unless we include as Orphic those systems of cosmology to which all scholars now agree in assigning a post-Aristotelian date. **Pherecydes** of Syros (about 540 B.C.) more closely approaches the scientific method. He describes Zeus, Chronos, and Chthon as the first beginnings of all things. There is here a basic thought that the universe sprang from the elements of air and earth, through the agency of time. This thought, however, the poet conceals under enigmatical symbols, referring the phenomena of nature not to natural agencies, but to the incomprehensible action of the gods.

The beginnings of moral philosophy are found in the ethical portrayals of the Homeric poems, in the writings of the Gnostic

¹ Cf. *Phaedo*, 69, 70.

Poets of the sixth century B.C., and especially in the sayings attributed to the **Seven Wise Men**. These sayings are characterized by a tone of cynicism, and exhibit a knowledge of the world's ways which is certainly remarkable if it belongs to the age to which it is generally assigned.¹

The **Division** of Greek philosophy into periods and schools is partly chronological and partly dependent on the development of philosophic thought. The following seems to be the most convenient arrangement :

- I. *Pre-Socratic Philosophy.*
- II. *Philosophy of Socrates and the Socratic Schools.*
- III. *Post-Aristotelian Philosophy.*

In the first period, the era of beginnings, philosophical speculation was largely objective ; it busied itself with the study of nature and the origin of the world. In the second period Socrates brought philosophy down to the contemplation of man's inner self ; it was a period in which the objective and subjective methods were blended. In the third period the subjective element was made preponderant ; the Stoics and Epicureans concerned themselves with man and his destiny, to the almost complete exclusion of cosmological and metaphysical problems.

Sources. The sources of Greek philosophy are :

Primary sources. Besides the complete works of Plato and Aristotle, we have several collections of fragments of philosophical writings ; for instance, Mullach's *Fragmenta Philosophorum Græcorum*, Ritter and Preller's *Historia Philosophiæ Græcæ*, Diels' *Doxographi Græci*, Fairbanks' *The First Philosophers of Greece*, Adams, *Texts*, etc. (New York, 1903).

¹ Plato's story (*Protagoras*, 343 A) of the meeting of the Seven Wise Men at Delphi is totally devoid of historical foundation. Even the names of the seven are not agreed upon. The enumeration which most frequently occurs is the following : Thales, Bias, Pittacus, Solon, Cleobulus, Chilo, and Periander. Cf. Ritter and Preller, *Hist. Phil. Græcæ* (ed. 1888), p. 2, note d.

Secondary sources. (1) *Ancient writers*, such as Plato, Aristotle, Xenophon, and Theophrastus,¹ in reference to pre-Socratic and Socratic philosophy; (2) *Alexandrian authorities*, such as Demetrius of Phalerus (third century B.C.), Ptolemy Philadelphus (third century B.C.), Callimachus (third century B.C.), author of the *πίνακες* or "tablets"; (3) *Later writers*: Cicero, Seneca, Plutarch, Justin Martyr, Clement of Alexandria, Diogenes Laertius (about A.D. 220); (4) *Modern critics and historians*: Tiedemann, Ritter and Preller, Zeller, Windelband, Diels, Tannery, Burnet, etc. Diels' *Doxographi Græci* (Berlin, 1879) is of great value in determining the affiliation of sources.²

FIRST PERIOD — PRE-SOCRATIC PHILOSOPHY

This period comprises: (1) the *Ionian School*—the philosophers of this school confined their attention to the study of *Nature* and sought out the material principle of natural phenomena; (2) the *Pythagoreans*, who made *Number* the basis of their philosophical system; (3) the *Eleatics*, whose speculations centered in the doctrine of the oneness and immutability of

¹ On Plato, Aristotle, Plutarch, Diogenes Laertius, etc., as sources for the history of Greek philosophy, cf. Fairbanks, *The First Philosophers of Greece* (New York, 1898), pp. 263 ff.; also Burnet, *Early Greek Philosophy* (London, 1892), pp. 370 ff.

² Tiedemann, *Griechenlands erste Philosophen* (Leipzig, 1781); Ritter, *History of Ancient Philosophy*, trans. by Morrison (4 vols., Oxford, 1838); Ritter and Preller, *Hist. Phil. Græcæ* (Ed. VII, Gothæ, 1888); Zeller, *Die Philosophie der Griechen* (fünfte Aufl., Leipzig, 1892 ff.). (References will be made to the English translations by Alleyne and others under the titles *Pre-Socratic Philosophy*, etc.) Tannery, *Pour l'histoire de la science hellène* (Paris, 1887); Windelband, *History of Ancient Philosophy*, trans. by Cushman (New York, 1899); *History of Philosophy*, trans. by Tufts (second edition, New York and London, 1901).

To these add Erdmann, *History of Philosophy*, trans. by Hough (3 vols., London, 1890); Benn, *The Greek Philosophers* (2 vols., London, 1883); *The Philosophy of Greece* (London, 1898); Gomperz, *The Greek Thinkers*, Vol. I, trans. by Magnus (London, 1901); Ueberweg, *op. cit.*; Schwegler, *Gesch. der griech. Phil.* (dritte Aufl., Tübingen, 1886).

For a more complete bibliography, cf. Weber, *History of Philosophy*, trans. by Thilly (New York, 1896), p. 8; Ueberweg, *op. cit.*, Vol. I, pp. 19 ff.; Erdmann, *op. cit.*, pp. 14 ff.

Being; (4) the *Sophists*, who, negatively, showed the unsatisfactory nature of all *Knowledge*, while, positively, they occasioned the inquiry into the conditions and limitations of knowledge.

CHAPTER I

EARLIER IONIAN SCHOOL

The Ionian school includes the Earlier Ionians, — **Thales**, **Anaximander**, and **Anaximenes**, — and the Later Ionians, whose proper historical place is after the Eleatic school.

THALES

Life. Thales, the first philosopher of Greece, was of Phœnician descent. He was born at Miletus, about the year 620 B.C.¹ He was a contemporary of Crœsus and Solon, and was counted among the Seven Wise Men. He is said to have died in the year 546 B.C.

Sources. Our knowledge of the doctrines of Thales is based entirely on secondary sources, especially on the account given by Aristotle in *Met.*, I, 3, 983. Cf. Ritter and Preller, *op. cit.*, pp. 9-11.

DOCTRINES

According to Aristotle, Thales taught that out of water all things are made.² Historical tradition is silent as to the reasons by which Thales was led to this conclusion. It is possible, as Aristotle conjectures, that the founder of the Ionian school was influenced by the consideration of the moisture of nutriment, etc.; he may have based his conclusion on a rationalistic interpretation of the myth of Oceanus, or he may have observed the alluvial deposits of the rivers of his native country, and concluded that, as earth, so all things else come from water. The saying that

¹ On the manner of computing the date of Thales, cf. Burnet, *op. cit.*, pp. 36 ff.

² *Met.*, I, 3, 983 b.

"The magnet has a soul because it attracts iron" is attributed to Thales on the authority of Aristotle, who, however, speaks conditionally, "if, indeed, he said," etc. We must not attach importance to Cicero's Stoical interpretation of Thales: "Thales Milesius aquam dixit esse initium rerum, Deum, autem, eam mentem quæ ex aqua cuncta fingeret." Such a dualism belongs to the time of Anaxagoras. Similarly, the saying that "All things are full of gods" (πάντα πλήρη θεῶν) is but the expression, in Aristotle's own phraseology, of the general doctrine of animism, or hylozoism, which is a tenet common to all the Earlier Ionians. They maintained that matter is instinct with life; or, as an Aristotelian would say, they did not distinguish between the material principle and the formal principle of life.

ANAXIMANDER

Life. Anaximander, who was also a native of Miletus, was born about the year 610 B.C. Theophrastus describes him as a disciple, or associate, of Thales. The date of his death is unknown.

Sources. *Primary sources.* Anaximander composed a treatise, or rather a poetical prose composition, περὶ φύσεως, which was extant when Theophrastus wrote. Of this work two sentences only have come down to us:

1. "All things must in equity again decline into that whence they have their origin, for they must give satisfaction and atonement for injustice, each in order of time."¹

2. The infinite "surrounds all things and directs all things."²

Secondary sources. Our chief secondary sources are Theophrastus (in the work φυσικῶν δόξαι, of which the existing fragments are published by Diels, *op. cit.*, p. 476) and Aristotle (especially in *Met.*, XII, 2, 1069 b; *Phys.*, III, 4, 203 b).

¹ Theophr., frag. 2, *apud* Diels, *Doxographi*, p. 476.

² Arist., *Phys.*, III, 4, 203 b.

DOCTRINES

From our secondary sources it is evident that, according to Anaximander, the originating principle (*ἀρχή*)¹ of all things is the *Infinite*, or rather the *Unlimited* (*ἄπειρον*). The reasons, however, which led to this conclusion are merely a matter of conjecture, as in the case of Thales' generalization. According to Aristotle, Anaximander, supposing that change destroys matter, argued that, unless the substratum of change is limitless, change must sometime cease. Thus, while modern physics holds that matter is indestructible, Anaximander maintained that it is infinite; for there can be no question as to the corporeal nature of the *ἄπειρον*: it is an infinite material substance. Critics, however, do not agree as to how Anaximander would have answered the questions, Is the unlimited an element or a mixture of elements? Is it qualitatively simple or complex? He certainly maintained that the primitive substance is infinite, but did not, so far as we know, concern himself with the question of its qualitative determinations.

The *ἄπειρον* has been likened to the modern notion of space and to the mythological concept of chaos. It is described by Anaximander himself as surrounding and directing all things, and by Aristotle it is described as *τὸ θεῖον*. We must not, however, attach to these expressions a dualistic or pantheistic meaning.

From the Boundless all things came, by a process which the *Πλάττω*² describes as separation (*ἀποκριθῆναι*). Living things sprang from the original moisture of the earth (through the

¹ "That Anaximander called this something by the name of *αἶνός* is clear from the doxographers: the current statement that the word *ἀρχή*, in the sense of a 'first principle,' was introduced by him, is probably due to a mere misunderstanding of what Theophrastus says." Burnet, *op. cit.*, p. 32.

On the meaning of *αἶνός* in the writings of the early Greek philosophers, cf. *Philosophical Review* (July, 1909), Vol. X, pp. 300 ff.

² Cf. Burnet, *op. cit.*, pp. 32, 33.

agency of heat). The first animals were therefore fishes, which after they came on shore threw off their scales and assumed new shapes. Man, too, was generated from other kinds of animals.¹ Anaximander is generally believed to have taught an infinity of worlds.

Historical Position. Comparing the doctrines of Anaximander with what we know of the teachings of Thales, we find that the former are far richer in their contents and betoken a higher development of speculative thought. They represent a higher grade of abstraction, as is evident in the substitution of the Boundless for the concrete substance, water.

ANAXIMENES

Life. Anaximenes of Miletus, who was an "associate" of Anaximander, composed a treatise the title of which is unknown. He died about 528 B.C.

Sources. Primary sources. The only fragment of the work of Anaximenes which has survived is a sentence quoted in the *Placita*. "Just as our soul, being air, holds us together, so do breath and air encompass the world."²

Secondary sources. Our principal secondary source is Theophrastus, whom pseudo-Plutarch, Eusebius (*Præparatio Evangelica*), Hippolytus (*Refutatio Omnium Hæresium*), etc., follow. Cf. Diels, *op. cit.*, p. 476.

DOCTRINES

According to all our secondary sources, Anaximenes taught that the principle, or ground, of all material existence is *air*. (*Ἄήρ* must, however, be taken in the Homeric sense of vapor, or mist.) This substance, to which is ascribed infinite quantity, is endowed with life. From it, by thinning (*ἀραίωσις*) and thickening (*πύκνωσις*), were formed fire, winds, clouds, water, and earth.

¹ Plut., *Strom.*, 2, *apud* Diels, *op. cit.*, p. 579.

² *Placita*, I, 3, 4, *apud* Diels, *op. cit.*, p. 278. The *Placita*, or *Placita Philosophorum*, is a collection of the "opinions" of philosophers ascribed to Plutarch. Like the *Eclogæ* of Stobæus, it is based on an earlier collection of opinions called *Ætîi Placita*, as this is in turn based on the *Vetusta Placita*, of which traces are found in Cicero. (Cf. Burnet, *op. cit.*, p. 372.)

The world is an animal, whose breathing is kept up by masses of air, which it inhales from the infinite space beyond the heavens.

Cicero incorrectly represents Anaximenes as identifying the divinity with the primitive Air. St. Augustine is more correct when he says, "*Nec deos negavit aut tacuit, non tamen ab ipsis ærem factum, sed ipsos ex ære ortos credidit.*"¹

Historical Position. Anaximenes was evidently influenced by his predecessors. From Thales he derived the qualitative determinateness of the primitive substance and from Anaximander its infinity. The doctrine of "thickening" and "thinning" is far more intelligible than the doctrine of "separating" which Anaximander taught.

Retrospect. The Early Ionian philosophers were students of nature (*φυσιολόγοι*) who devoted themselves to the inquiry into the origin of things. They agreed (1) in positing the existence of a single original substance; (2) in regarding this substance as endowed with force and life (hylozoism). They were dynamists. Heraclitus, a Later Ionian, who was in final analysis a dynamist also, marks the transition from the early hylozoism to the mechanism of the Later Ionian school.

CHAPTER II

THE PYTHAGOREAN SCHOOL

About the time the Ionic philosophy attained its highest development in Asia Minor, another phase of philosophical thought appeared in the Greek colonies of Italy. As we turn to the Pythagorean philosophy, the first philosophy of the West, we are struck with the importance which the ethico-religious aspect assumes from the outset; philosophy now is not so much an inquiry into the causes of things as a

¹ *De Civ. Dei*, VIII. 2.

rule of life, a way of salvation. It is remarkable, too, that this notion of philosophy never wholly died out in the subsequent development of Greek thought. Plato, Aristotle, and the Stoics constantly referred philosophy to *life* as well as to *knowledge*.

The Pythagorean system of speculation is sometimes contrasted with the Ionian as being an embodiment of the Doric spirit, which was artistic, conservative, ethical, while the Greeks of the Ionian colonies were characterized by worldly sense, versatility, curiosity, and commercial enterprise. Both philosophies, however, are wholly Greek.

Life of Pythagoras. Samos was the home and probably the birth-place of Pythagoras. It is certain that he journeyed to Italy about the year 530 B.C., and that he founded in Crotona a philosophico-religious society. The story of his journey through Egypt, Persia, India, and Gaul is part of the Neo-Pythagorean legend, though there is good reason for believing that the account of his death at Metapontum is true.

Sources. *Primary sources.* The Neo-Pythagoreans mention an extensive Pythagorean literature as dating from the days of the founder. Modern scholarship has, however, shown that (1) the *reputed writings of Pythagoras* are certainly spurious; (2) the *fragments of Philolaus* (περὶ φύσεως) are for the most part genuine: it was probably from these that Aristotle derived his knowledge of the Pythagorean doctrines; Philolaus lived towards the end of the fifth century; (3) the *fragments of Archytas of Tarentum* are spurious, with the exception of a few, which do not add to our knowledge of the Pythagorean doctrines, as they bear too evident marks of Platonic influence.

*Secondary sources.*¹ There is no school the history of which is so overgrown with legend as the Pythagorean. Indeed, Pythagoras and his disciples are seldom mentioned by writers anterior to Plato and Aristotle, and even the latter does not mention Pythagoras more than once or twice; he speaks rather of the Pythagoreans. Thus, the nearer we approach the time of Pythagoras the more scanty do our data become, while the farther the tradition is removed from Pythagoras the fuller they grow. Obviously, therefore, the Neo-Pythagoreans of the first century B.C. are not to be relied on when they speak of Pythagoras and his doctrines.

¹ Cf. Burnet, *op. cit.*, pp. 301 ff.

The Pythagorean School was a society formed for an ethico-religious purpose. It was governed by a set of rules (*ὁ τρόπος τοῦ βίου*). The members recognized one another by means of secret signs; simplicity of personal attire and certain restrictions in matter of diet were required. Celibacy and the strict observance of secrecy in matters of doctrine were also insisted upon. The political tendency of the school was towards the aristocratic party in Magna Græcia, a tendency which led to the persecution and final dispersion of the society.

PYTHAGOREAN DOCTRINES

All that can with certainty be traced to Pythagoras is the doctrine of metempsychosis, the institution of certain ethical rules, and the germ idea of the mathematico-theological speculation, which was afterwards carried to a high degree of development. Consequently, by Pythagorean doctrines we must understand the doctrines of the disciples of Pythagoras, though these referred nearly all their doctrines to the founder. (Indeed, they carried this practice so far that they constantly introduced a question by quoting the *αὐτὸς ἔφα*, the *ipse dixit* of the Master.)

The Number Theory. The most distinctive of the Pythagorean doctrines is the principle that number is the essence and basis (*ἀρχή*) of all things. To this conclusion the Pythagoreans were led "by contemplating with minds trained to mathematical concepts" the order of nature and the regularity of natural changes.¹

To the question, Did the Pythagoreans regard numbers as the physical substance of things, or merely as symbols or prototypes? the answer seems to be that they meant number to stand to things in the double relation of prototype and substance. And if the assertion, "All is number," sounds strange to us, we must consider how profound was the impression produced on the minds of these early students of nature by the

¹ Arist., *Met.*, I, 5, 986a, 23.

first perception of the unalterable universal order of natural changes. Then we shall cease to wonder at the readiness with which number — the formula of the order and regularity of those changes — was hypostatized into the substance and basis of all things that change.

Philolaus (frag. 3) distinguishes three natural kinds of number: odd, even, and the odd-even. Aristotle¹ says that the Pythagoreans considered odd and even to be the elements (*στοιχεῖα*)² of number. "Of these," he continues, "the one is definite and the other is unlimited, and the unit is the product of both, for it is both odd and even, and number arises from the unit, and the whole heaven is number."³ From the dualism which is thus inherent in the unit, and consequently in number, comes the doctrine of *opposites*, finite and infinite, odd and even, left and right, male and female, and so forth. From the doctrine of opposites proceeds the notion of *harmony*, which plays such an important part in the Pythagorean philosophy, for harmony is the union of opposites.

Application of the Doctrine of Number: 1. *To physics.* True to their mathematical concept of the world, the Pythagoreans analyzed bodies into surfaces, surfaces into lines, and lines into points. From this, however, we must not conclude that they conceived the numerical unit of all things as material; they apparently used numbers and geometrical quantities merely as quantities, abstracting from their contents, that is, without determining whether the contents were material or immaterial, — a distinction which belongs to a later date.

Every body is an expression of the number four; the surface is three, because the triangle is the simplest of figures; the line is two, because of its terminations; and the point is

¹ *Met.*, I, 5, 985 b, 24.

² The term was first used in the technical scientific sense by Plato.

³ On the Pythagorean concept of the Infinite, cf. *Archiv f. Gesch. der Phil.* (April, 1901), Bd. VII, Heft 3.

one. Ten is the perfect number, because it is the sum of the numbers from one to four.

2. *To the theory of music.* The application of the number theory to the arrangement of tones is obvious. The story,¹ however, of the discovery of the musical scale by Pythagoras, as told by Iamblichus and others, is one of many instances in which discoveries made by the successors of Pythagoras were attributed to Pythagoras himself.

3. *To cosmology.* Not only is each body a number, but the entire universe is an arrangement of numbers, the basis of which is the perfect number, ten. For the universe consists of ten bodies, — the five planets, the sun, the moon, the heaven of the fixed stars, the earth, and the counter-earth (*ἀντίχθων*). The earth is a sphere; the counter-earth, which is postulated in order to fill up the number ten, is also a sphere, and moves parallel to the earth. In the center of the universe is the central fire, around which the heavenly bodies, fixed in their spheres, revolve from west to east, while around all is the peripheral fire. This motion of the heavenly bodies is regulated as to velocity, and is therefore a harmony. We do not, however, perceive this *harmony of the spheres*, either because we are accustomed to it, or because the sound is too intense to affect our organs of hearing.

4. *To psychology.* It would seem that the early Pythagoreans taught nothing definite regarding the nature of the soul. In the *Phædo*,² Plato introduces into the dialogue a disciple of Philolaus, who teaches that the soul is a harmony, while Aristotle³ says: "Some of them (the Pythagoreans) say that the soul is identified with the corpuscles in the air, and others say that it is that which moves (*τὸ κινεῖν*) the corpuscles." The idea, however, that the soul is a harmony seems to be part of the doctrine of the Pythagoreans. The *transmigration of souls*

¹ Cf. Zeller, *op. cit.*, I, 431, n.

² *Phædo*, 85 E.

³ *De An.*, I, 2, 404 a, 26.

is, as has been said, traceable to the founder of the school, though it was probably held as a tradition, being derived from the mysteries without being scientifically connected with the idea of the soul or with the number theory.

5. *To theology.* The Pythagoreans did not make extensive application of their number theory to their theological beliefs. They seem to have conformed, externally at least, to the popular religious notions, though there are indications of a system of purer religious concepts which were maintained esoterically.

6. *To ethics.* The ethical system of the Pythagoreans was thoroughly religious. The supreme good of man is to become godlike. This assimilation is to be accomplished by virtue. Now *virtue is a harmony*: it essentially consists in a harmonious equilibrium of the faculties, by which what is lower in man's nature is subordinated to what is higher. Knowledge, the practice of asceticism, music, and gymnastics are the means by which this harmony is attained. Finally, the Pythagoreans used numbers to define ethical notions. Thus, they said, justice is a number squared, ἀριθμὸς ἰσάκεις ἴσος.

Historical Position. The chief importance of the Pythagorean movement lies in this, that it marks a deepening of the moral consciousness in Greece. The old-time buoyancy of religious feeling as seen in the Homeric poems has given way to a calmer and more reflective mood, in which the sense of guilt and the consequent need of atonement and purification assert themselves.

As a system of philosophy, the body of Pythagorean doctrine must, like all the pre-Socratic systems, be regarded as primarily intended to be a philosophy of nature, and this is how Aristotle describes it.¹ It is not concerned with the conditions of knowledge, and although the society which Pythagoras founded was ethical, the philosophy which is associated

¹ *Met.*, I, 8, 989 b, 29.

with that society treats of ethical problems only incidentally and in a superficial manner.

As an investigation of nature the Pythagorean philosophy must be pronounced a very decided advance on the speculative attempts of the Ionians. The Pythagoreans leave the concrete, sense-perceived basis of existence, and substitute for it the abstract notion of number, thus preparing the way for a still higher notion—that of Being.

CHAPTER III

THE ELEATIC SCHOOL

The members of this school were concerned not so much with the origin of things as with the principles of the world of things as it now is. Their inquiries centered round the problem of change, and in their solution of this problem they introduced the notions of Being and Becoming, thus carrying speculation into regions strictly metaphysical. The chief representatives of the school are **Xenophanes** the theologian, **Parmenides** the metaphysician, **Zeno** the dialectician, and **Melissus**, who shows a tendency to return to the views of the Earlier Ionian students of nature.

Sources. The work entitled *Concerning the Opinions*, or *Concerning Xenophanes, Zeno, and Gorgias*, which contains an account of the doctrines of Xenophanes, Zeno, and others, and which was at one time included among Aristotle's works, is now known to have been written neither by Aristotle nor by Theophrastus, but by a later writer of the Aristotelian school.¹ Our knowledge of the Eleatic philosophy is derived from some fragments of the writings of the Eleatics themselves, from Aristotle's account of them in his *Metaphysics*, and from the works of Simplicius, who had access to a more complete Eleatic literature than we now possess.

¹ Cf. Ritter and Preller, *op. cit.*, p. 81.

XENOPHANES

Life. Xenophanes was born at Colophon, in Asia Minor, about the year 570 B.C. According to Theophrastus, he was a disciple of Anaximander. After wandering through Greece as a rhapsodist, he settled at Elea in southern Italy; from this city is derived the name of the school which he founded. The date of his death is unknown.

Sources. It is important to distinguish here (1) the fragments of Xenophanes' didactic poem, and (2) the accounts given by our secondary authorities. In the former we find merely a set of theological opinions; in the latter Xenophanes is represented as holding certain views on general metaphysical problems.

DOCTRINES

In his *Didactic Poem* Xenophanes opposes to the polytheistic belief of the time the doctrine of the unity, eternity, unchangeableness, sublimity, and spirituality of God. With the enthusiasm and fine frenzy of a prophet, he inveighs against the notions commonly held concerning the gods. "Each man," he says, "represents the gods as he himself is: the negro as black and flat-nosed, the Thracian as red-haired and blue-eyed; and if horses and oxen could paint, they, no doubt, would depict the gods as horses and oxen" (frag. 6). So, also, he continues, men ascribe to the gods mental characteristics which are human; they do not understand that God is "all eye, all ear, all intellect."

According to our Authorities,—and we have no right to challenge their unanimous verdict in this matter,—all that is said in the sacred poem of Xenophanes is to be referred to the unity and eternity of the totality of being. Plato¹ and Aristotle² describe Xenophanes as teaching the unity of all things. If this pantheism appears to us to be irreconcilable with the monotheism of the poem, we must not conclude that the contradiction was apparent to Xenophanes, who, though he could

¹ *Sophis.*, 242 D.

² *Met.*, I, 5, 986 b, 21.

rise above the popular concept of the gods, could not wholly free himself from the notion, so deeply rooted in the Greek mind, that nature is imbued with the divine.

1. In his *metaphysical inquiry* Xenophanes seems, according to the pseudo-Aristotelian treatise above mentioned, to have started with the principle that "Nothing comes from nothing," whence he concluded that there is no Becoming. Now, plurality depends on Becoming; if, then, there is no Becoming, there is no plurality: "All is one, and one is all." The authority, however, of this portion of the treatise is doubtful, though it may with safety be said that if Xenophanes did not develop this line of reasoning as Parmenides his disciple afterwards did, the premises of these conclusions are implicitly contained in the theological poem. For the same reason, it is uncertain whether Xenophanes maintained the infinity or the finite nature of the Deity, or whether he endowed the Deity with a certain spherical shape.

2. In *physics*, Xenophanes, in common with others of his school, forgets the unity of being which, as a metaphysician, he had established, and proceeds to an investigation of the plurality which he had denied. He advocates empirical knowledge, though he holds it to be unworthy of entire confidence, teaching (frag. 16) that truth is to be discovered by degrees. According to some of our authorities he held that the *primitive substance* was earth; according to others he held that it was water and earth. A few attribute to him the doctrine of four primitive elements. There is better foundation for the opinion that he supposed the earth to have passed from a fluid to its present solid condition,¹ basing his belief, according to Hippolytus, on the fact that petrified marine animals are found on land and even on mountains. Thus, although the one total is eternal, the world in its present form is not eternal.

Historical Position. Xenophanes' system is, so far, the boldest attempt to synthesize the phenomena of the universe. In

¹ Cf. frags. 9 and 10.

fact, it is one instance among many in which the desire to find the one in the manifold — a desire which is the inspiration of all philosophical speculation—is carried to the excess of monism. For, if we are to accept any theory that will reconcile Xenophanes' metaphysics with his theology, we must hold that he identified nature, the one, immutable, eternal, with God, who likewise possesses these attributes.

PARMENIDES

Life. Parmenides, who was, perhaps, the greatest of all the pre-Socratic philosophers, was born at Elea about 540 B.C. According to Aristotle, he was a disciple of Xenophanes, whose doctrines he took up and carried to their idealistic consequences. He had a more definite grasp of principles than Xenophanes had, and developed them with greater thoroughness than his master had done.

Sources. The didactic poem *περὶ φύσεως*, composed by Parmenides and preserved by Sextus, Proclus, and others, consists of three parts. The first is a sublimely conceived introduction, in which the goddess of truth points out to the philosopher two paths of knowledge, the one leading to a knowledge of truth, the other to a knowledge of the opinions of men. The second part of the poem describes the journey to truth, and contains the metaphysical doctrines of the author. The third part, dealing with the opinions of men, contains a hypothetical physics, a cosmology of the apparent.

DOCTRINES

Metaphysical Doctrines. Truth consists in the knowledge that *Being* is, and that *not-Being* can neither exist nor be conceived to exist. The greatest error lies in treating Being and not-Being as the same.¹ From this fundamental error arise the opinions of men. Truth lies in thought, for "nothing can be but what can be thought." The senses lead to error. Being, therefore, is, and since not-Being is not, Being is one. It is consequently unchangeable and unproduced, despite the testimony

¹ Poem, lines 43 ff.

of the senses to the contrary. For how could Being be produced? Either from not-Being, which does not exist, or from Being, in which case it was before it began to be. Therefore it is unproduced, unchangeable, undivided, whole, homogeneous, equally balanced on all sides, like a perfect sphere.¹

From the comparison of Being to a sphere it appears that Being is not incorporeal.² Ideas do not appear in philosophy *ex abrupto*. They are gradually developed in the course of speculation. Thus, Parmenides' idea of reality is not that of the Ionians, who spoke of a crude material substratum of existence. Neither is it the highly abstract notion of Being which we find in the philosophy of Plato and Aristotle. It is a something intermediate between these extremes, and is by some likened to our notion of space.

Physical Doctrines. Though right reason (λόγος) maintains that Being is one and immutable, the senses and common opinion (δόξα) are convinced of the plurality and change which apparently exist around us. Placing himself, therefore, at this point of view, Parmenides proceeds³ to give us

1. *A cosmology of the apparent.* Here he is evidently influenced by the Pythagorean doctrine of opposites. He maintains that all things are composed of light, or warmth, and darkness, or cold; of these, the former, according to Aristotle,⁴ corresponds to Being, the latter to not-Being. They are united by a *Deity* (Δαίμων, ἡ πάντα κυβερνᾷ). They are symbolically described as male and female, and their union is said to be effected by Eros, the first creation of the Deity.⁵

2. *An anthropology of the apparent.* The life of the soul, perception and reflection, depend on the blending of the light-warm and the dark-cold principles, each principle standing, as we should say, in psychical relation to a corresponding principle in the physical world.

¹ Lines 97 ff.

³ Lines 110 ff.

⁵ Line 130.

² Cf. Burnet, *op. cit.*, p. 194.

⁴ *Met.*, I, 5, 986 b, 31.

In his cosmology, as well as in his anthropology, Parmenides did not abandon the metaphysical doctrine that Being is one and that change is an illusion. The views just described are those which Parmenides *would have held* had he believed in plurality and change.

Historical Position. Parmenides is the first Greek philosopher to place reason in opposition to opinion. Though he makes no attempt at determining the conditions of knowledge, he prepares the way for subsequent thinkers and formulates the problem which Socrates was to solve by his doctrine of concepts.

The doctrine of the unity of Being could not be further developed. It was left for Zeno, the disciple of Parmenides, to give a more thorough dialectical demonstration of the monistic idea.

ZENO OF ELEA

Life. Zeno of Elea, born about 490 B.C., was, according to Plato,¹ the favorite pupil of Parmenides. He defended the doctrines of his master, and showed, by the use of dialectics, the absurdity of common opinion.

Sources. Plato speaks of a work (apparently the only work) of Zeno, which was a polemic against the common view that plurality and change are realities. It consisted of several discourses (λόγοι), in each of which were *ὑποθέσεις*, or suppositions, made with the intention of reducing them *ad absurdum*. The method is, therefore, indirect, and it is because of the skill with which Zeno applied this method that Aristotle, if we are to believe Diogenes and Sextus, regarded him as the *founder of dialectic*.

The work, with the exception of a few extracts preserved by Simplicius, is lost. We are obliged, consequently, to rely almost entirely on secondary sources. Chief among these is the *Physics* of Aristotle, in which we find Zeno's arguments against the reality of motion.²

DOCTRINES

The **Arguments against Motion** are as follows. *First argument:* A body, in order to move from one point to another, must move through an infinite number of spaces; for magnitude

¹ *Parm.*, 127 B.

² *Phys.*, VI, 9, 239b, 9 ff.

is divisible *ad infinitum*. But the infinite cannot be traversed; therefore motion is impossible. *Second argument*: The problem of Achilles and the tortoise. *Third argument*: A body which is in one place is certainly at rest. Now, the arrow in its flight is at each successive moment in one place; therefore it is at rest. *Fourth argument*: This is based on the fact that two bodies of equal size move past each other twice as fast (if they move with equal velocities in opposite directions) as one would move past the other if this latter were stationary. Motion, therefore, is an illusion, because one of its fundamental laws — that bodies with equal velocities traverse a certain space in equal times — is not true.

Aristotle¹ meets these arguments by defining the true nature of time, and by pointing out the difference between *actual* and *potential* infinity.

Similarly, Zeno, according to our secondary sources, argued against Plurality and Space. (1) Zeno argued directly against the *testimony of the senses*: If a measure of corn produces a sound, each grain ought to produce a sound.² (2) Against *space*: If Being exists in space, space itself must exist in space, and so *ad infinitum*. This argument is contained in one of the extracts preserved by Simplicius. (3) If the *manifold* exists, it must be at once infinitely great and infinitesimally small, because it has an infinitude of parts which are indivisible. Therefore the existence of the manifold involves a contradiction.³

Historical Position. Zeno's contribution to the philosophy of the Eleatic school consists in what must have been considered an irrefutable indirect proof of the twofold principle on which the school was founded, namely, that Being is one and that change is an illusion.

¹ *Loc. cit.*, 241 a.

² *Simpl., Phys.*, 255 r; *Arist., Phys.*, VII, 5, 250 a, 20.

³ *Cf. Fairbanks, op. cit.*, p. 113.

MELISSUS

Life. Melissus was, according to Diogenes Laertius, a native of Samos. We have no reason for doubting that he was, as Plutarch says, the commander of the Samian fleet which defeated the Athenians off the coast of Samos in the year 442 B.C.¹ He was, therefore, a younger contemporary of Zeno, and it is possible that, like Zeno, he was a pupil of Parmenides. He wrote a work, *περὶ τοῦ ὄντος*, or *περὶ φύσεως*.

Sources. Of the work just mentioned, Simplicius has preserved some fragments. These fragments agree with the accounts given of the doctrines of Melissus in the first part of the pseudo-Aristotelian treatise *Concerning Xenophanes, etc.*

DOCTRINES

Method. Melissus undertook, as Zeno had done, to defend the doctrines of Parmenides. But while Zeno's method of argumentation was *indirect*, Melissus employed the *direct* method. He took up the principles of the Ionians and tried to show points of union between the Ionian and Eleatic schools.

Metaphysical Doctrine. All that we know of Melissus' doctrine concerning Being may be summed up in the four propositions: (1) Being is eternal; (2) Being is infinite; (3) Being is one; (4) Being is unchangeable. His metaphysical doctrine is, therefore, identical with that of Parmenides, save in one respect. Parmenides did not pronounce Being infinite, while according to Melissus infinity is one of the attributes of Being. But, as appears from frag. 8, Melissus must not be understood to maintain the true infinity of Being. Evidently he had in mind infinite magnitude. Again, when he says ² *σῶμα μὴ ἔχει*, we must not imagine that Melissus had attained a precise notion of the incorporeal. His metaphysics was a blending of the Ionian with the Eleatic doctrines, and we may suppose that there were many points of contradiction.

The **Physical Doctrines** attributed to Melissus by Stobæus and Philoponus cannot safely be said to have been held by him.

¹ *Pericl.*, Chap. 26.

² Frag. 16.

Historical Position. Melissus does not represent a development of Eleatic philosophy. His task was one of synthesis, or reconciliation, and in accomplishing this task he did not wholly escape the danger to which such an undertaking is always exposed: he admitted into Eleatic doctrines notions and definitions which were antagonistic to Eleatic principles.

Retrospect. With Melissus the Eleatic school ends. What was left of Eleaticism drifted into Sophism, for which Zeno had prepared the way by his abuse of dialectical reasoning. But, though the school disappeared, its influence continued, and may be traced through Heraclitus, Anaxagoras, and the Atomists down to Plato and Aristotle. The Eleatics were the first to formulate the problems of Being and Becoming — problems which are always the center of metaphysical speculation. These were the problems that Plato and Aristotle were to solve by the theory of Ideas and the doctrine of matter and form.

Pre-Socratic philosophy is throughout objective in spirit and aim; it is a philosophy of nature. To this, Eleatic philosophy forms no exception. It is true that the Eleatics give to physics merely a hypothetical value, and that they decry sense-received knowledge, contrasting it with reason. Yet on closer examination it will be seen that all their inquiry is concerned with the origin and explanation of nature, and that the Being which they maintain to be the only reality is a something extended in space, or, as Aristotle¹ describes it, the substrate of sensible things. Zeno, indeed, introduced dialectic into philosophy, but he treated it merely as an instrument of proof, unaccompanied by any inquiry into the nature and conditions of knowledge. The founder of the philosophy of the concept is Socrates, and Aristotle² is right when he looks for the germ of Socratic philosophy, not in the Eleatic doctrine, but in the teachings of Democritus and the Pythagoreans.

¹ Cf. *Met.*, IV, 5, 1010 a, and *De Celo*, III, 298 b, 21.

² *Met.*, XIII, 4, 1078.

CHAPTER IV

LATER IONIAN PHILOSOPHERS

These are separated from the Earlier Ionian philosophers not merely in point of time but also in respect to doctrine. The difference consists chiefly in the tendency which the Later Ionians manifest to depart from the monistic dynamism of the early physicists and adopt a dualistic mechanical concept of the universe. **Heraclitus**, who is, in ultimate analysis, a dynamist, marks the beginning of the change which, after the more or less hesitating utterances of **Empedocles**, appears successively in the mechanism of the *Atomists* and in the openly pronounced dualism of **Anaxagoras**. Heraclitus is, therefore, the connecting link between earlier and later Ionian philosophy.

HERACLITUS

Life. Heraclitus, surnamed the Obscure (ὁ σκοτεινός) on account of the mist of oracular expressions in which (purposely, according to some writers) he veiled his teachings, was born at Ephesus about the year 530 B.C. He composed a work *περὶ φύσεως*, consisting of three parts,¹ the first of which was *περὶ τοῦ παντός*; the second, (λόγος) *πολιτικός*; and the third, (λόγος) *θεολογικός*. Of the fragments which have come down to us, very few can be assigned to the second of these parts, and fewer still to the third. The existing fragments offer considerable difficulty in the matter of arrangement and interpretation, a difficulty which is increased by the fact that many of our secondary authorities are untrustworthy. The doctrines of Heraclitus resemble the fundamental tenets of the Stoics, and here as elsewhere the Stoic historians are inclined to exaggerate such resemblances. On this account, even for modern scholars, Heraclitus is still the Obscure.

Sources. Besides the fragments above mentioned, we have as sources of information the writings of Plato and Aristotle, who give a tolerably complete account of the teachings of Heraclitus.

¹ Cf. Diog. Laer., IX, 7. References are to the work *περὶ τῶν βίων, δογμάτων καὶ ἀποφθεγμάτων τῶν ἐν φιλοσοφίᾳ εὐδοκμησάντων* (ed. Cobet, Paris, 1850), which is attributed to Diogenes Laertius.

DOCTRINES

Doctrine of Universal Change. Heraclitus places himself in direct opposition to the Eleatic teaching and to the data of common, unreflecting consciousness. The mass of men — and here he includes not merely Pythagoras and Xenophanes but also Homer and Hesiod, associating them with the common herd — see nothing but sense-forms; they fail to comprehend the all-discerning *reason*.¹ We should follow reason alone. "Much learning does not teach the mind."²

Now, the first lesson which reason teaches us is that *there is nothing permanent* in the world around us. The senses, when they attribute to things a permanence which things do not possess, are deceived and thus give rise to the greatest of all errors, the belief in immobility. The truth is that all things change, — *πάντα ῥωπεῖ*. Everything is involved in the stream of change: from life comes death, from death comes life; old age succeeds youth; sleep changes into wakefulness and wakefulness into sleep. In a word, nothing *is*, all is *Becoming*.

Both Plato³ and Aristotle⁴ set down the doctrine of the universality of change as being the most characteristic of the teachings of Heraclitus. Plato, moreover, expressly mentions the Heraclitean comparison of the stream in which wave succeeds wave. But it is remarkable that the expression, "All things are flowing," which so conveniently sums up the doctrine of universal change, cannot be proved to be a quotation from the work of Heraclitus.

Doctrine of Fire. Another source of error is this: that the poets and sages knew no more than the common herd does about *the divine, all-controlling fire*. By fire, however, Heraclitus

¹ Frag. 18. The numbers used are those used by Burnet, following Bywater, *Her. Eph. Reliquiæ* (Oxford, 1877).

² Frag. 16.

³ *Theat.*, 160 D, and *Cratyl.*, 401 D.

⁴ *Met.*, IV, 5, 1010 a, 13, and *De An.*, I, 2, 405 a, 25.

meant invisible warm matter rather than the fire which is the result of combustion. It is endowed with life, or at least with the power of Becoming — "All things are exchanged for fire and fire for all things, just as wares are exchanged for gold and gold for wares."¹ It is, therefore, what Aristotle would call the material as well as the efficient cause of all things, *ἐ*— and here Heraclitus shows himself the lineal descendant of the Earlier Ionians. Moreover, since all things proceed from fire according to fixed law, fire is styled *Zeus, Deity, Logos, Justice*.

This account would, however, be incomplete without some mention of the force which is postulated by Heraclitus as coeternal with fire. "*Strife* is the father of all, and king of all, and some he made gods, and some, men."² Opposed to strife, which gave rise to things by separation, is *harmony*, which guides them back to the fire whence they came. These expressions, however, while they speak the language of dualism, are not to be understood as more than mere figures of speech, for fire, and fire alone, is the cause of all change.

Origin of the World. The world was produced by the transformations of the primitive fire. There is a cycle of changes by which fire through a process of condensation, or rather of *quenching* (*σβέννυσθαι*), becomes water and earth. This is the downward way. And there is a cycle of changes by which through a process of rarefaction, or *kindling* (*ἄπτεσθαι*), earth goes back to water and water to fire. This is the upward way. Now, the one is precisely the inverse of the other: *ὁδὸς ἄνω κάτω μία*.³

Thus did the world originate and thus does it constantly tend to return whence it came. Concord is ever undoing the work of strife, and one day strife will be overcome; but then the Deity, as it were in sport,⁴ will construct a new world in which strife and concord will once more be at play.

¹ Frag. 22.

² Frag. 44.

³ Frag. 69.

⁴ Frag. 79; cf. note *apud* Fairbanks, *op. cit.*, p. 42.

Doctrine of Opposites. From this continual change comes the *doctrine of opposites*. There is a constant swaying (like the bending and relaxing of a bow¹), in which all things pass successively through their opposites: heat becomes cold, dryness becomes moisture, etc. To produce the new, like must be coupled with unlike; high and low, the accordant with the discordant, are joined, that out of one may come all, and out of all, one. On account of this doctrine Heraclitus is censured by Aristotle² and his commentators for denying the *principle of contradiction*. Hegelians, on the other hand, credit Heraclitus with being the first to recognize the unity of opposites, the identity of Being and not-Being.³ The truth is that Heraclitus deserves neither the blame of the Aristotelians nor the praise of the Hegelians. He does not affirm opposite predicates of the same subject at the same time and *sub eodem respectu*. Moreover, his is a physical, not a logical, theory, and to maintain the unity of opposites in the concrete is not the same as to hold the identity of Being and not-Being in the abstract.

Anthropological Doctrines. Man, body and soul, originated from fire. The body is of itself rigid and lifeless, an object of aversion when the soul has departed from it. The soul, on the other hand, is divine fire preserved in its purest form. "The driest soul is wisest and best."⁴ If the soul fire is quenched by moisture, reason is lost. Like everything else in nature, the soul is constantly changing. It is fed by fire, or warm matter, which enters as breath or is received through the senses. Notwithstanding this view, Heraclitus in several of the fragments speaks of future reward and of the fate of the soul in Hades.⁵

Heraclitus *distrusted sense-knowledge*. "Eyes and ears," he said, "are bad witnesses to men, if they have souls that

¹ Frag. 45.

² *Met.*, IV, 3, 1005 b.

³ Cf. Hegel, *Gesch. der Phil.*, I, 305; *Werke*, XIII, 305; trans. by Haldane, I, 283.

⁴ Frag. 74.

⁵ Cf. Zeller, *Pre-Socratic Phil.*, II, 85.

understand not their language."¹ Rational knowledge is alone trustworthy. Heraclitus, however, did not, nor did any of the pre-Socratic philosophers, attempt to determine the conditions of rational knowledge. That task was first undertaken by Socrates.

Ethical Doctrines. Heraclitus did not undertake a systematic treatment of ethical questions. Nevertheless, he prepared the way for Stoicism by teaching that *Immutable Reason* is the law of the moral as well as of the physical world. "Men should defend law as they would a fortress."² We must subject ourselves to universal order if we wish to be truly happy: "the character of a man is his guardian divinity."³ This is the doctrine of *contentment*, or *equanimity* (εὐαρέστησις), in which, according to the Heracliteans, Heraclitus placed the supreme happiness of man.

Historical Position. Even in ancient times Heraclitus was regarded as one of the greatest *physicists*. He was deservedly styled ὁ φυσικός; for, while others among the philosophers of nature excelled him in particular points of doctrine, he had the peculiar merit of having established a universal point of view for the study of nature as a whole. He was the first to call attention to the transitoriness of the individual and the permanence of the law which governs individual changes, thus formulating the problem to which Plato and Aristotle afterwards addressed themselves as to the paramount question of metaphysics. The naive conception of the universe as evolved, according to the Earlier Ionians, from one substance, by a process which may be witnessed in a water tank, now gives place to the notion of a world ruled in its origin and in all its processes by an all-pervading Logos. Moreover, though Heraclitus formulated no system of epistemology, his distrust of the senses and his advocacy of rational knowledge show that philosophy had begun to emerge from the state of primitive innocence. It was this germ of

¹ Frag. 4.² Frag. 100.³ Frag. 121.

criticism which was developed into full-grown Scepticism by Cratylus, while along another line of development it led to the critical philosophy of the Sophists and to the Socratic doctrine of the concept.

Heraclitus and the Eleatics were, so to speak, at opposite poles of thought. In the doctrines of Empedocles and the Atomists we can perceive the direct influence of the Eleatic school.

EMPEDOCLES

Life. Empedocles, who is the most typical representative of the Later Ionian school, holds a middle course between the monism of Parmenides and the extreme panmetabolism of Heraclitus. He was born at Agrigentum, in Sicily, about the year 490 B.C. According to Aristotle, he lived sixty years. The tradition which represents Empedocles as traveling through Sicily and southern Italy and claiming divine honors wherever he went is only too abundantly proved by fragments of his sacred poems. The story, however, that he committed suicide by leaping into the crater of Etna is a malicious invention; it is always mentioned with a hostile purpose, and usually in order to counteract some tale told by his adherents and admirers.

Sources. Empedocles, who was a poet as well as a philosopher, composed two poetico-philosophical treatises, the one metaphysical (*περὶ φύσεως*), and the other theological (*καθαρμοί*). Of the five thousand verses which these poems contained, only about four hundred and fifty have come down to us. On account of the language and imagery which Empedocles employs, he is styled by Aristotle *the first rhetorician*.¹

DOCTRINES

Metaphysics. Empedocles, like Parmenides, begins with a denial of Becoming. Becoming, in the strict sense of qualitative change of an original substance, is unthinkable. Yet, with Heraclitus, he holds that particular things arise, change, decay, and perish. He reconciles the two positions by teaching that generation is but the *commingling*, while decay is the *separation* of primitive substances which themselves remain unchanged.²

¹ Cf. Zeller, *Pre-Socratic Phil.*, II, 119, n.

² Verses 98 ff.

The primitive substances are four: *fire, air, earth, and water*; these afterwards came to be known as the Four Elements. Empedocles calls them *roots* (τέσσαρα τῶν πάντων ῥιζώματα). The word *elements* (στοιχεῖα) was first used by Plato. The mythological names which Empedocles applied to these radical principles of Being have no particular philosophical value; they may be regarded as the accidents of poetical composition. The elements are underived, imperishable, homogeneous. Definite substances are produced when the elements are combined in certain proportions. Now, the moving cause, the force, which produces these combinations is not inherent in the elements themselves; it is distinct from them. Here we have the first word of mechanism in Greek philosophy. It is true, Empedocles speaks of this force as *love* and *hatred*,¹ but the phraseology merely proves that the idea of force is not yet clear to the Greek mind: Empedocles does not define the difference between force and matter on the one hand, and between force and person on the other. Moreover, to deny that Empedocles was a dualist, to explain that by love and hatred he meant merely a poetical description of the conditions of mixture and separation, and not the true causes of these processes, would imply that Aristotle and all our other authorities misunderstood the whole doctrine of Empedocles.

Cosmological Doctrines. The four elements were originally combined in a *sphere* (εὐδαιμονέστατος θεός) where love reigned supreme.² Gradually hatred began to exert its centrifugal influence; love, however, united the elements once more to form those things which were made. And so the world is given over to love and hatred, and to the endless pulsation of periodic changes.

Biological Doctrines. Empedocles seems to have devoted special attention to the study of living organisms. Plants first sprang from the earth before it was illumined by the sun; and

¹ Verse 80.

² Arist., *Met.*, I, 4, 985 a.

then came animals, which were evolved out of all sorts of monstrous combinations of organisms by a kind of survival of the fit; for those only survived which were capable of subsisting.¹ In this theory Empedocles expressly includes man.

The *cause of growth* in animals and plants is fire striving upwards impelled by the desire to reach its like, the fire which is in the sky. Blood is the seat of the soul, because in blood the elements are best united.² It is by reason of the movement of the blood that inspiration and respiration take place through the pores which are closely packed together all over the body.³

Psychological Doctrines. *Sense-knowledge* is explained by the doctrine of emanations and pores.⁴ Like is known by like, that is, things are known to us by means of like elements in us, "earth by earth, water by water," etc.⁵ In the case of sight, there is an emanation from the eye itself, which goes out to meet the emanation from the object.⁶ *Thought and intelligence* are ascribed to all things, no distinction being made between corporeal and incorporeal. Thought, therefore, like all other vital activities, depends on the mixture of the four elements.⁷ Yet Empedocles seems to contrast the untrustworthiness of sense-knowledge with knowledge acquired by reflection, or rather with knowledge acquired by all the powers of the mind.⁸ He did not conceive the *soul* as composed of elements; he did not consider it as an entity apart from the body; he merely explained its activities by the constitution of the body. In his sacred poem, however, he adopted the doctrine of *transmigration*, borrowing it from Pythagorean and Orphic tradition, without making it part of his scientific theories. "Once ere now I was a youth, and a maiden, a shrub, a bird, and a fish that swims in silence in the sea."⁹

¹ Verses 245-270.

² Theophr., *De Sensu*, 10; cf. Diels, *op. cit.*, p. 502.

³ Verses 288 ff.

⁴ Verse 281.

⁵ Verse 333.

⁶ Verses 316 ff.

⁷ Zeller, *Pre-Socratic Phil.*, II, 167.

⁸ Verse 19.

⁹ Verse 383. For various readings of this line, cf. Ritter and Preller, *op. cit.*, p. 150.

Concerning the Gods. Empedocles sometimes speaks as if he held the common polytheistic belief. Sometimes, on the contrary, as in verses 345 to 350, he describes the Deity almost in the words of Xenophanes: "He is sacred and unutterable mind, flashing through the whole world with rapid thoughts." Still, Empedocles apparently found no means of introducing this concept of the Deity into his account of the origin of the universe.

Historical Position. While Empedocles holds a recognized place among the Greek poets, and while Plato and Aristotle appear to rank him highly as a philosopher, yet scholars are not agreed as to his precise place in the history of pre-Socratic speculation. Ritter classes him with the Eleatics, others count him among the disciples of Pythagoras, while others again place him among the Ionians on account of the similarity of his doctrines to those of Heraclitus and the early Physicists. The truth, as Zeller says, seems to be that there is in the philosophy of Empedocles an admixture of all these influences, — Eleatic (denial of Becoming, untrustworthiness of the senses), Pythagorean (doctrine of transmigration), and Ionic (the four elements and love and hatred, — these being an adaptation of Heraclitean ideas). It would be a mistake, however, to underestimate the originality of Empedocles as a philosopher. It was he who introduced the notion of element, fixed the number of elements, and prepared the way for the atomistic mechanism of Leucippus. The defects, however, of his metaphysical system are many, chief among them being, as Aristotle¹ remarked, the omission of the idea of an intelligent Ruler under whose action natural processes would be regular instead of fortuitous.

ANAXAGORAS

Life. Anaxagoras was born at Clazomenæ about 500 B.C. Aristotle² says that he was "prior to Empedocles in point of age, but subsequent to him in respect to doctrine." From his native city he went to Athens, where

¹ *De Gen. et Corr.*, II, 6, 333 b.

² *Met.*, I, 3, 984 a, 11.

he was for many years the friend of Pericles, and where he counted among his disciples the dramatist Euripides. When, shortly before the outbreak of the Peloponnesian War, Pericles was attacked, Anaxagoras was tried on the charge of impiety, but escaped from prison and, returning to his native Ionia, settled in Lampsacus, where he died about the year 430 B.C.

Sources. Diogenes Laertius says that Anaxagoras wrote a work which, like most of the ancient philosophical treatises, was entitled *περὶ φύσεως*. Of this work Plato speaks in the *Apology*; in the sixth century of our era Simplicius could still procure a copy, and it is to him that we owe such fragments as have come down to us. These fragments were edited by Schaubach in 1827, and by Schorn in 1829. They are printed by Mullach.¹

DOCTRINES

Starting Point. Like Empedocles, Anaxagoras starts with the denial of Becoming, and, like Empedocles also, he is chiefly concerned to explain, in accordance with this denial, the plurality and change which exist. He differs, however, from Empedocles, both in his doctrine of primitive substances and in his doctrine of the cosmic force which formed the universe.

Doctrine of Primitive Substances. Anaxagoras maintained that all things were formed out of an agglomerate of substances in which bodies of determinate quality — gold, flesh, bones, etc. — were commingled in infinitely small particles to form the germs of all things.² This agglomerate was called by Aristotle *τὰ ὁμοιομερῆ*; it was called by Anaxagoras *seeds* (*σπέρματα*) and *things* (*χρήματα*). So complete was the mixture, and so small were the particles of individual substances composing it, that at the beginning no substance could be perceived in its individual nature and qualities, and accordingly the mixture as a whole might be said to be qualitatively indeterminate, though definite qualities were really present in it. Yet, minute as were the primitive particles, they were divisible. Thus the agglomerate on the one hand reminds us of the *ἄπειρον* of Anaximander, and

¹ *Fragments*, Vol. I, pp. 249 ff.

² Frag. 1.

on the other hand bears a certain analogy to the atomistic concept of matter.

Mind (Νοῦς) is the moving power which formed the world from the primitive mass of "seeds." Anaxagoras is the first to introduce into philosophy the idea of the supersensible, for which reason Aristotle describes him ¹ as standing out "like a sober man from the crowd of random talkers who preceded him." Mind is distinguished from other things because (1) it is *simple*—everything else is mingled of all things; mind alone is unmixed. It is "the thinnest of all things and the purest." (2) It is *self-ruled* (αὐτοκρατής). (3) *It has all knowledge* about everything. (4) It has supreme *power over all things*.²

However, as Plato and Aristotle point out, Anaxagoras did not work out his theory of mind in the details of the cosmic processes. He did not formulate the idea of *design*, nor did he apply the principle of design to particular cases. Mind was for him merely a world-forming force. There is, moreover, a certain vagueness attaching to the idea of Νοῦς. Without entering into the details of the question of interpretation,³ we may conclude that although Anaxagoras certainly meant by the Νοῦς something incorporeal, he could not avoid speaking of it in terms which, taken literally, imply corporeal nature; for it is the fate of new ideas to suffer from imperfect expression until philosophical terminology has adjusted itself to the new conditions which they create.

Cosmology. Mind, therefore, first imparted to matter a circular motion⁴ separating *Air* (from which came water, earth, and stone, and whatever is cold, dark, and dense) and *Ether* (from which came whatever is warm, light, and rare). Throughout this account of the processes of things Anaxagoras considers

¹ *Met.*, I, 3, 984 b, 17.

² Frag. 6.

³ Cf. Zeller, *op. cit.*, II, 342 ff.; *Archiv f. Gesch. der Phil.*, Bd. VIII (1895), pp. 151, 461-465; also *Philosophical Review*, Vol. IV (September, 1895), p. 565, and *Mind*, N.S., Vol. V (1896), p. 210.

⁴ Frags. 7 and 8.

the material cause only, thereby deserving Aristotle's reproach, that he used the *Noûs* merely as a *Deus ex machina*.

Psychology. Like is not known by like, but rather by unlike,¹ and in this Anaxagoras is directly opposed to Empedocles. The senses are "weak but not deceitful"; the faculty of true knowledge is *Noûs*, the principle of understanding, which is also² an intrinsic psychic principle—the *soul*. Plutarch's statement³ that Anaxagoras represented the soul as perishing after its separation from the body is, to say the least, unreliable.

From the foregoing it is evident that Anaxagoras was not a Sceptic. The reason which he alleges for the untrustworthiness of the senses is that they see only part of what is in the object.⁴ The intellect, which is unmixed, is capable of seeing *the everything which is in everything*.

Historical Position. The special importance of the philosophy of Anaxagoras is due to his doctrine of immaterial mind. This doctrine implies the most pronounced dualism; it contains in germ the teleological concept which was evolved by Socrates and perfected by Plato and Aristotle. It was only natural that these philosophers, who approached metaphysical problems with minds already accustomed to the idea of the immaterial, should blame Anaxagoras for not having made better use of that idea. But we must not underrate the service which Anaxagoras rendered to Greek philosophy by his doctrine of immaterial intellect.

Diogenes of Apollonia and **Archelaus** of Athens, who are sometimes included among the Later Ionian philosophers, exhibit a tendency towards a return to the hylozoism of the first philosophers.

¹ Theophr., *De Sensu*, frag. 27; cf. Diels, *Doxographi*, p. 507.

² Arist., *De An.*, I, 2, 405 a, 13.

³ *Placita*, V, 25, 3; cf. Diels, *op. cit.*, p. 437.

⁴ Frag. 6.

CHAPTER V

THE ATOMISTS

The Atomists represent the last phase of Ionian speculation concerning nature. They accept the dualistic ideas which characterize the Later Ionian philosophy, but by their substitution of necessity for intelligent force they abandon all that dualistic philosophy had to bequeath to them, and fall lower than the level which the early hylozoists had reached.

It was at Miletus that the Ionian philosophy first appeared, and it was Miletus that produced **Leucippus**, the founder of Atomism, who virtually brings the first period of Greek philosophy to a close. So little is known of Leucippus that his very existence has been questioned.¹ His opinions, too, have been so imperfectly transmitted to us that it is usual to speak of the tenets of the Atomists without distinguishing how much we owe to Leucippus, who by Aristotle and Theophrastus is regarded as the founder of the system, and how much we owe to **Democritus**, who was the ablest and best-known expounder of atomistic philosophy.

DEMOCRITUS

Life. Democritus of Abdera was born about the year 460 B.C. It is said — though it is by no means certain — that he received instruction from the Magi and other Oriental teachers. It is undoubtedly true that, at a later time, he was regarded as a sorcerer and magician, — a fact which may account for the legend of his early training. He was probably a disciple of Leucippus. There is no historical foundation for the widespread belief that he laughed at everything.²

Sources. If, as is probable, Leucippus committed his doctrines to writing, no trustworthy fragment of his works has reached us. From the titles and

¹ Cf. Burnet, *op. cit.*, p. 350.

² Cf. Zeller, *Pre-Socratic Phil.*, II, 213, n.

the fragments of the works of Democritus it is evident that the latter covered in his written treatises a large variety of subjects. The most celebrated of these treatises was entitled μέγας διάκοσμος. Mullach (*Fragmenta*, I, 340 ff.) publishes fragments of this and other Democritean writings.

Aristotle in the *Metaphysics* and elsewhere gives an adequate account of the doctrines of Leucippus and Democritus.

DOCTRINES

General Standpoint. One of the reasons which led the Eleatics to deny plurality and Becoming was that these are inconceivable without void, and void is unthinkable. Now, the Atomists concede that without void there is no motion, but they maintain that void exists, and that in it exists an infinite number of indivisible bodies (ἄτομοι) which constitute the plenum. Aristotle is therefore justified in saying¹ that according to Leucippus and Democritus the elements are the *full* (πλήρες) and the *void* (κενόν). The full corresponds to Eleatic Being and the void to not-Being. But the latter is as real as the former.² On the combination and separation of atoms depend Becoming and decay.

The Atoms. The atoms, infinite in number and indivisible, differ in *shape*, *order*, and *position*.³ They differ, moreover, in quantity, or *magnitude*,⁴ for they are not mere mathematical points, their indivisibility being due to the fact that they contain no void. They have, as we would say, the same specific gravity, but because of their different sizes they differ in *weight*.⁵

The **Motion** by which the atoms are brought together is not caused by a vital principle inherent in them (hylozoism),

¹ *Met.*, I, 4, 985 b, 4.

² Cf. Arist., *Phys.*, IV, 6, 213 a, 31, for arguments by which the Atomists proved the existence of the void.

³ Arist., *Met.*, I, 4, 985 b, 14.

⁴ Arist., *Phys.*, III, 4, 203 a, 33.

⁵ Arist., *De Generatione et Corruptione*, I, 8, 324 b and 325 a.

nor by love and hatred, nor by any incorporeal agency, but by *natural necessity*, by virtue of which atoms of equal weight come together. It is, therefore, incorrect to say that the Atomists explained the motion of the atoms by attributing it to *chance*. Aristotle gave occasion to this misunderstanding by identifying *αὐτόματον* and *τύχη*, though it is Cicero¹ who is accountable for giving the misapprehension the wide circulation which it obtained.

The atomistic explanation was, therefore, that atoms of different weights fell with unequal velocities in the primitive void. The heavier atoms, consequently, impinged on the lighter ones, imparting to them a *whirling motion* (*δίνη*). The Atomists, as Aristotle remarks,² did not advert to the fact that *in vacuo* all bodies fall with equal velocity. Nowhere in the cosmological scheme of the Atomists is there place for mind or design; it is utter materialism and casualism, if by casualism is meant the exclusion of intelligent purpose.

Anthropology. Plants and animals sprang from moist earth. Democritus, according to our authorities, devoted special attention to the study of *Man*, who, he believes, is, even on account of his bodily structure alone, deserving of admiration. He not only describes as minutely as he can the bodily organization of man, but, departing from his mechanical concept of nature, takes pains to show the utility and adaptation of every part of the human body. But over all and permeating all is the *soul*. Now the soul, for the Atomists, could be nothing but corporeal. It is composed of the finest atoms, perfectly smooth and round, like the atoms of fire.³ Democritus, accordingly, does not deny a distinction between soul and body. He teaches that the soul is the noblest part of man; man's crowning glory is moral excellence. He is said to have reckoned the human soul among the divinities.⁴ And yet, for Democritus, as for every

¹ *De Nat. Deorum*, I, 24, 66.

² *Phys.*, IV, 8, 215 a.

³ Arist., *De An.*, I, 2, 403 b, 28.

⁴ Cf. Zeller, *op. cit.*, II, p. 262.

materialist, the soul is but a finer kind of matter. Indeed, according to Aristotle,¹ the Atomists identified soul-atoms with the atoms of fire which are floating in the air.

The Atomists' *theory of cognition* was, of course, determined by their view of the nature of the soul. They were obliged to start out with the postulate that all cognitive processes are corporeal processes, and since the action of body upon body is conditioned by contact, they were obliged to conclude that all the senses are mere modifications of the sense of touch.²

The contact which is a necessary condition of all sense-knowledge is effected by means of *emanations* (ἀπορροαί, — the term is Aristotle's), or *images* (εἰδῶλα, δεικῆλα). These are material casts, or shells, given off from the surface of the object; they produce in the medium the impressions which enter the pores of the senses. They are practically the same as the Epicurean *effluxes*, which Lucretius describes:

Quæ, quasi membranæ, summo de corpore rerum
Dereptæ, volitant ultro citroque per auras.

Thought cannot differ essentially from sense-knowledge. They are both changes (ἐτεροιώσεις) of the soul-substance occasioned by material impressions. Logically, therefore, Democritus should have attached the same value to thought as to sense-knowledge, and since sense-knowledge is obscure (σκοτή), he should have concluded that no knowledge is satisfactory. He saves himself, however, from absolute Scepticism, although at the expense of logical consistency; for he maintains that thought, by revealing the existence of invisible atoms, shows us the true nature of things. The doctrine which Aristotle³ attributes to Democritus is his opinion as to what Democritus should have taught, rather than an account of what he actually did teach.⁴

¹ *De Respiratione*, 4, 472 a, 30.

² Arist., *Met.*, IV, 5, 1009 b, and *De Sensu*, 4, 442 a, 29.

³ *Met.*, IV, 5, 1009 a, 38.

⁴ Cf. Zeller, *op. cit.*, II, 272.

Ethics. Although most of the extant fragments which contain Democritus' ethical teachings are merely isolated axioms without any scientific connection, yet our secondary authorities attribute to him a *theory of happiness* which is really the beginning of the science of ethics among the Greeks. From what Democritus says of the superiority of the soul over the body, of thought over sense, it is natural to expect that he should place man's supreme happiness in a right disposition of mind and not in the goods of the external world. "Happiness," he says,¹ "and unhappiness do not dwell in herds nor in gold; the soul is the abode of the Divinity." Happiness is in no external thing, but in "cheerfulness and well-being, a right disposition and unalterable peace of mind." The word which is here rendered *cheerfulness* (εὐθυμία) is interpreted by Seneca and other Stoics as *tranquillity*. Democritus, however, was more akin to the Epicureans than to the Stoics, and it is probable that by εὐθυμία he meant "delight" or "good cheer."² There is in the moral maxims of Democritus a note of *pessimism*. Happiness, he believes, is difficult of attainment, while misery seeks man unsought.

Historical Position. The atomistic movement is recognized as an attempt to reconcile the conclusions of the Eleatics with the facts of experience. It is not easy, however, to determine with accuracy how far the Atomists were influenced by their predecessors and contemporaries. Even if the dates of Heraclitus, Anaxagoras, Empedocles, and Leucippus were known more definitely than they are, it would still be a matter of no small difficulty to show in what degree each philosopher depended on and in turn influenced the thought and writings of the others. One thing is certain: it was Atomism which more than any of the other pre-Socratic systems prepared the way for Sophism and the consequent contempt of all knowledge.

¹ Frag. 1.

² Cf. Sidgwick, *Hist. of Ethics*, p. 15.

In the first place, atomistic philosophy was materialistic, and "Materialism ends where the highest problems of philosophy begin." Moreover, the armor of the Atomist offered several vulnerable points to the shafts of Sophism. He fallaciously concluded that atoms are uncaused because they are eternal; and, what is worse, he inconsistently maintained the difference in value between sense-knowledge and thought. The Sophists might well argue, as indeed some of them did argue, that if the senses are not to be trusted, reason also is untrustworthy, for the soul, according to the Atomists, is, like the senses, corporeal.

Thus did atomistic philosophy prepare the way for Sophism.

CHAPTER VI

THE SOPHISTS

Sophistic philosophy, which constitutes so important a crisis in the history of Greek thought and civilization, was germinally contained in the preceding systems. Atomistic materialism culminated in the Sophism of Protagoras; the doctrines of Heraclitus paved the way to Scepticism, as was demonstrated by Cratylus, the teacher of Plato; and Gorgias the Sophist merely carried to excess the dialectic method introduced by Zeno the Eleatic. All these schools — Atomistic, Heraclitean, Eleatic — had, as has been said, attacked by the aid of specious fallacies the trustworthiness of common consciousness, so that until Socrates appeared on the scene to determine the conditions of scientific knowledge no positive development of philosophy was possible. Meantime there was nothing left but to deny the possibility of attaining knowledge. And that is what the Sophists did: they are the first Sceptics of Greece.

There was, then, an inevitable tendency on the part of the prevalent philosophy to culminate in Scepticism. Besides, the

social and political conditions of the time contributed to the same result by unsettling the moral and religious ideals which the Athenian had hitherto held as matters of tradition. The Persian wars and the military achievements of subsequent years brought about an upheaval in the social and political condition of Athens. Old ideas were being adjusted to new circumstances, the scope of education was being widened; in a word, "the whole epoch was penetrated with a spirit of revolution and progress," and none of the existing forces could hold that spirit in check. We must take into account also the development of poetry and especially of the drama. "The whole action of the drama," says Zeller, "comic as well as tragic, is based (at this time) on the collision of duties and rights—on a dialectic of moral relations and duties."¹ The period was one of revolution and readjustment.

History of the Sophists. The word *Sophist*, etymologically considered, denotes a wise man. In the earlier pre-Socratic period it meant one who made wisdom or the teaching of wisdom his profession. Later on, the abuse of dialectic disputation of which the Sophists were guilty caused the name *sophism* to become synonymous with *fallacy*.

The Sophists flourished from about 450 B.C. to 400 B.C.; not that Sophism as a profession disappeared altogether at the latter date, but, after the appearance of Socrates as a teacher, the importance of the Sophist dwindled into insignificance.

The first Sophists are represented as going about from city to city, gathering around them the young men and imparting to them in consideration of certain fees the instruction requisite for the conduct of public affairs. In the instruction which they gave they set no value upon objective truth; indeed, the ideal at which they aimed was the art of making the worse seem the better cause, and *vice versa*. Readiness of exposition and presentation of arguments in a specious manner were all that they pretended to teach.

Such is the history of the school in general. The chief Sophists are Protagoras of Abdera, the *individualist*; Gorgias of Leontini, the *nihilist*; Hippias of Elis, the *polymathist*; and Prodicus of Ceos, the *moralist*.

¹ *Op. cit.*, II, 403.

Sources. It is difficult, as Plato¹ points out, to define accurately the nature of the Sophist. The Sophists left no fixed theorems equally acknowledged by all the school. They were characterized more by their mode of thought than by any fixed content of thought. Besides, Plato, Aristotle, and all our other authorities are so avowedly hostile to the Sophists, and raise so unreasonable objections to Sophism (as when they accuse the Sophists of bartering the mere semblance of knowledge for gold), that we must weigh and examine their every statement before we can admit it as evidence.

DOCTRINES

Protagoras of Abdera (born about 480 B.C.) composed many works, of which, however, only a few fragments have survived. Plato² traces the opinions of Protagoras to the influence of Heraclitus. Nothing is, all is Becoming; but, even this Becoming is relative. As the eye does not see, except while it is being acted upon, so the object is not colored except while it acts upon the eye.³ Nothing, therefore, becomes in and for itself but only for the percipient subject.

Hence, as the object presents itself differently to different subjects, there is no objective truth: *Man is the measure of all things.* Plato apparently reports these as the very words of Protagoras⁴: *φησὶ γάρ που πάντων χρημάτων μέτρον ἀνθρώπου εἶναι, τῶν μὲν ὄντων ὡς ἔστι, τῶν δὲ μὴ ὄντων ὡς οὐκ ἔστιν.*

Grote⁵ and others doubt whether the above is really the line of thought followed out by Protagoras himself. In both Plato and Aristotle we find allusions to the employment by Protagoras of the dialectic introduced by Zeno. Moreover, if we are to make the argument valid, we must, before we conclude that *all knowledge is relative*, introduce the atomistic principle that all knowledge is conditioned by physical alterations.

The *relativity of knowledge*, as it was professed by Protagoras, is a denial of all objective truth and a reduction of

¹ *Sophis.*, 218 C.

³ *Arist., Met.*, IX, 3, 1047 a, 4.

⁵ *Plato*, II, 322.

² *Theæt.*, 160 B.

⁴ *Theæt.*, 152 A.

knowledge to individual opinion. It follows from this that a proposition and its opposite are equally true if they appear to different persons to be true. In this way did Protagoras lay the foundation of the *eristic* method, — the method of dispute, — which is associated with the name *Sophist*, and which was carried to such extremes by the Sophists of later times.

"*Of the gods*," said Protagoras, "I can know nothing, neither that they are nor that they are not. There is much to prevent our attaining this knowledge — the obscurity of the subject and the shortness of human life." These are the famous words with which, according to Diogenes,¹ Protagoras began the treatise that was made the basis of a charge of impiety, and led ultimately to his expulsion from Athens. They contain a profession of agnosticism. Perhaps the context, if we possessed it, would show whether Protagoras went further and really professed atheism, the crime of which he was accused.

Gorgias of Leontini, a contemporary of Protagoras, composed a treatise, *On Nature, or the Non-Existing*, which is preserved by Sextus Empiricus. We possess, as secondary authority, a portion of the pseudo-Aristotelian treatise *Concerning Xenophanes, etc.*

As it was the aim of Protagoras to show that everything is equally true, it may be said that Gorgias strove to show that everything is equally false. The latter proves by the use of dialectical reasoning that (1) Nothing exists; (2) Even if it existed, it could not be known; and (3) Even if knowledge were possible, it could not be communicated.²

Hippias of Elis, a younger contemporary of Protagoras, was preëminent even among the Sophists for the vanity with which he paraded his proficiency in rhetoric, mathematics, astronomy, and archæology. He boasted that he could say something new on any topic, however often it might have been discussed.

¹ IX, 51.

² Cf. Sext., *Mathem.*, and the treatise *Concerning Xenophanes, etc.*, apud Ritter and Preller, *op. cit.*, pp. 189 ff.

Plato¹ attributes to him the saying that law is a tyrant of men, since it prescribes many things contrary to nature. This was probably meant as a bold paradox, one of the many devices by which the Sophists attracted the admiration of the Athenians.

Prodicus of Ceos was also a contemporary of Protagoras. Such was the esteem in which he was held by Socrates that the latter often called himself his pupil, and did not hesitate to direct young men to him for instruction.

Prodicus is best known by his moral discourses, in which he shows the excellence of virtue and the misery of a life given over to pleasure. The most celebrated of these discourses is entitled *Hercules at the Cross-Roads*. The choice of a career, the employment of wealth, the unreasonableness of the fear of death, are some of the subjects on which he delivered exhortations.

In spite of all this, Prodicus, as a Sophist, could not consistently avoid moral scepticism. If there is no truth, there is no law. If that is true which seems to be true, then that is good which seems to be good. He did not, accordingly, attempt to define virtue or moral good: he merely drew pictures of the ethical ideals, exhorting rather than teaching. The first to attempt a systematic treatment of ethical problems was he who first strove to fix the conditions of scientific knowledge through concepts, — Socrates, with whom the second period of Greek philosophy begins.

Historical Position. Sophistic philosophy was the outcome of the complex influences which shaped the social, political, philosophical, and religious conditions of Athens during the latter half of the fifth century before Christ. It was the philosophy which suited that age. Pericles found pleasure in the society of Sophists, Euripides esteemed them, Thucydides sought instruction from them, and Socrates sent them pupils.

Yet Sophism did not constitute an advance in philosophic thought. It is true that it directed attention to the subjective

¹ *Protag.*, 337 C.

element in human knowledge. In fact, it made the subjective element everything in knowledge ; it reduced truth to the level of opinion, and made man the measure of all things. And herein lay the essential error of Sophism, vitiating the whole system. Sophism was not the beginning of an era in philosophy : it was more properly the ending of the era which preceded Socrates. The onward movement of thought was not resumed until Socrates showed that knowledge is as far from being wholly subjective as it is from being wholly objective. It is Socrates, therefore, who inaugurates the new era.

Retrospect. Greek philosophy exhibits in its historical development a rhythm of movement which is perfect in the simplicity of the formula by which it is expressed — *objective, subjectivo-objective, subjective*. Pre-Socratic philosophy was objective ; the philosophy of Socrates and the Socratic schools was partly objective, partly subjective, while the philosophy of later times was almost entirely subjective.

By the *objectivity of pre-Socratic philosophy* is meant that :

1. It concerned itself almost exclusively with the problems of the physical world, paying little attention to the study of man, his origin, dignity, and destiny.

2. It did not busy itself with the problems of epistemology. At first all sense-presentations were taken without question or criticism as true presentations of reality, and even when the Eleatics distinguished between reason and sense they did not go any farther towards determining the conditions of rational knowledge.

3. Ethics was not studied scientifically ; compared with cosmogony, cosmology, and metaphysics, it did not receive proportionate attention.

Briefly, the philosophy of Greece before the time of Socrates possessed all the *naïveté* that was to be expected in the first speculative attempts of a people who never tired of nature and never looked beyond nature for their ideals.

SECOND PERIOD—SOCRATES AND THE SOCRATIC SCHOOLS

In this second period of its history Greek philosophy reaches its highest development. It is a comparatively short period, being comprised within the life spans of the three men who so dominated the philosophic thought of their age that their names, rather than the names of schools or cities, are used to mark off the three subdivisions into which the study of the period naturally falls. We shall, therefore, consider

- I. *Socrates and the imperfectly Socratic Schools.*
- II. *Plato and the Academics.*
- III. *Aristotle and the Peripatetics.*

The problem with which this period had to deal had already been formulated by the Sophists, — how to save the intellectual and moral life of the nation, which was threatened by materialism and scepticism. Socrates answered by determining the conditions of intellectual knowledge, and by laying deep the scientific foundation of ethics. Plato, with keener insight and more comprehensive understanding, developed the Socratic doctrine of concepts into a system of metaphysics, gigantic in its proportions, but lacking in that solidity of foundation which characterized the Aristotelian structure. Aristotle carried the Socratic idea to its highest perfection, and, by prosecuting a vigorous and systematic study of nature, supplied what was defective in Plato's metaphysical scheme. The central problem was always the same; the answer was also the same, though in different degrees of organic development, — *concept, Idea, essence*. The view adopted was neither entirely subjective nor entirely objective, — the concept doctrine, which was the first and simplest answer, being the typical formula for the union of subject and object, of self and not-self.

CHAPTER VII

SOCRATES

Life. The story of Socrates' life, as far as it is known, is soon told. He was born at Athens in the year 469 B.C. He was the son of Sophroniscus, a sculptor, and of Phænarete, a midwife. Of his early years little is recorded. We are told that he was trained in the profession of his father. For education, we must suppose that he received merely the usual course of instruction in music, geometry, and gymnastics, so that, when he calls himself a pupil of Prodicus and Aspasia, he is to be understood as speaking of friends from whom he learned by personal intercourse rather than of teachers in the stricter sense of the word. Indeed, in Xenophon's *Symposium* he styles himself a self-taught philosopher, *αὐτομαθὴς τῆς φιλοσοφίας*. It is, therefore, impossible to say from what source he derived his knowledge of the doctrines of Parmenides, Heraclitus, Anaxagoras, and the Atomists.

The gods¹ had revealed to Socrates that Athens was to be the scene of his labors and that his special mission in life was the moral and intellectual improvement of himself and others. Accordingly, after some years spent in his father's workshop, he devoted himself to this mission with all the enthusiasm of an unusually ardent nature: from a sculptor of statues he became a teacher who strove to shape the souls of men. So devoted was he to this task of teaching the Athenians that he never became a candidate for public office,² and, with the exception of the military campaigns, which led him as far as Potidæa and Delium, and a public festival which required his presence outside the city, nothing could induce him to go beyond the walls of Athens.

In fulfilling his task as teacher, he did not imitate the Sophists, who were at that time the recognized public teachers in Greece. He would neither accept remuneration for his lessons nor would he give a systematic course of instruction, preferring to hold familiar converse with his pupils and professing a willingness to learn as well as to teach. He taught in the market place, in the gymnasium, in the workshop, — wherever he found men willing to listen, — and once he had secured an audience, he held it with that extraordinary eloquence which is so graphically described in the *Symposium* of Plato.³ He discarded all the arts and airs of the Sophists; in appearance,

¹ Cf. Plato, *Apologia*, 33 C.

² *Symposium*, 215.

³ Cf. Zeller, *Socrates and the Socratic Schools*, p. 67.

manners, and dress, as well as in the studied plainness of his language, he stood in sharp contrast to the elegance and foppishness of his rivals. Yet, by what seems to us a singular instance of vindictive misrepresentation, he was held up to scorn by Aristophanes in the *Clouds* as a Sophist, a teacher of what was merely a semblance of wisdom, and as a vain, pompous, and overbearing man. Socrates' private means must have been scanty, and the mere mention of his wife, Xanthippe, recalls the misery and degradation which must have been his lot in domestic life.

The narrative of his trial, condemnation, and death is one of the most dramatic in all literature. The closing scene as described in the *Phædo* is unequaled for pathos and sublimity by any other page that even Plato wrote. His death occurred in the year 399 B.C.

Character. The personality of Socrates has impressed itself more deeply on the history of philosophy than has that of any other philosopher. The picture which Xenophon draws of him is almost ideally perfect. "No one ever heard or saw anything wrong in Socrates; so pious was he that he never did anything without first consulting the gods; so just that he never injured any one in the least; so master of himself that he never preferred pleasure to goodness; so sensible that he never erred in his choice between what was better and what was worse. In a word, he was of all men the best and the happiest."¹ Plato's account agrees with this. Socrates, however, — "Saint" Socrates as he is sometimes called, — was not without his traducers. There was in his character a certain incongruity (an *ἀντομία* his admirers called it), an inconsistency between the external and the internal man, together with a certain uncouthness of speech and manner, which was entirely un-Greek. These peculiarities, while they endeared him to his friends, made him many enemies, and established a tradition that in later times developed into a tissue of accusations, of which coarseness, arrogance, profligacy, and impiety are but a few. Although it is true that these charges are devoid of even the slightest foundation, we must remember that in the age of Pericles the Athenians were by no means a race of superior beings, and even Socrates despite his higher moral ideals did not rise far above his contemporaries in point of moral conduct.

The Socratic Divinity. Socrates, as is well known, often spoke of a divine sign, or a heavenly voice, which in the great crises of his life communicated to him advice and guidance from above. Many are the suggestions as to what he meant by such allusions. Lewes² reminds us that while Socrates, Plato, and Xenophon never speak of a genius or a demon, they

¹ *Mem.*, I, 1.

² *Biographical History of Philosophy*, I, 166.

frequently make mention of a demonic something, — *δαμόνιον τι*, which Cicero translates *divinum quoddam*.¹ Socrates was a profoundly religious man, and it is quite natural that he should designate as "divine" the voice of conscience, or, as Hermann² suggests, the inner voice of individual tact, which restrained him not merely from what was morally wrong, but also (as in the case of his refusal to defend himself) from whatever was unwise or imprudent. This voice was probably nothing more than a vague feeling for which he himself could not account, a warning coming from the unexplored depths of his own inner consciousness.

Sources. Socrates, so far as we know, never wrote anything; it is certain that he committed none of his doctrines to writing. We are obliged, therefore, to rely for our knowledge of his teaching on the accounts given by Plato and Xenophon. Aristotle, also, speaks of the doctrines of Socrates; but he tells us nothing which may not be found in the writings of the two disciples who stood in so close personal relation with their master. It has been said that Plato and Xenophon present different views of Socrates, and to a certain extent the statement is correct; but the views which they present are pictures which supplement rather than contradict each other. Xenophon wrote his *Memorabilia* as a defense of Socrates. Being of a practical turn of mind, and wholly unable to appreciate the speculative side of Socrates' teaching, he attached undue importance to the ethical doctrines of his master. Plato, with deeper insight into the philosophical phase of Socrates' mind, draws a picture of the sage which fills in and perfects the sketch left us by Xenophon. It is well to remember, moreover, that the doctrines of Socrates were, of necessity, difficult to describe. The teaching of one who never wrote even an essay on philosophy must necessarily be lacking in the compactness and conciseness which are possible only in the written word.³

SOCRATES' PHILOSOPHY

General Character of Socrates' Teaching. The Ionians and the Eleatics had shown, by their failure to account for things as they are, that no value is to be attached either to sense-perception or to metaphysical knowledge arising from the notions of Being, Becoming, the One, the Many, etc. This was as clear

¹ Cf. *De Divinatione*, I, 54, 122.

² Cf. Zeller, *Socrates*, p. 95.

³ An excellent treatise on Socrates and his philosophy is M. Piat's *Socrate* (*Grands Philosophes series*, Paris, 1900).

to Socrates as it had been to the Sophists. But, whereas the Sophists had forthwith given up the search after truth, Socrates insisted that by reflecting on our own mental constitution we may learn to determine the conditions of knowledge, to form concepts as they ought to be formed, and by this means place the principles of conduct as well as the principles of knowledge on a solid scientific foundation. *Know thyself* (γνῶθι σεαυτόν): this is the sum of all philosophy. From the consideration of the objective world (nature) we must turn to the study of the subjective (self). Thus, philosophy "from heaven descended to the low-roofed house" of man.

Socratic Method. The first lesson which self-knowledge teaches is our own ignorance. If, therefore, we are to arrive at a knowledge through concepts, that is, at a knowledge of things, not in their surface qualities, but in their unalterable natures, we must have recourse to the *dialogue*; in other words, we must converse in order to learn. Thus, love of knowledge and the impulse to friendship are the same, and the blending of these two is what constitutes the peculiarity of the *Socratic Eros*.¹

The Socratic dialogue involves two processes, the one negative and the other positive.

1. *The negative stage.* Socrates approached his interlocutor as if seeking for knowledge. Assuming a humble attitude, he asked a question about some commonplace thing; from the answer he drew material for another question, until at last by dint of questioning he extorted from his victim a confession of ignorance. By reason of the pretended deference which, during the process of interrogation, Socrates paid to the superior intelligence of his pupil, the process came to be known as *Socratic irony*.

2. *The positive stage.* Socrates now proceeded, by another series of questions, to add together, as we say, particular instances, until finally the pupil was made to arrive inductively

¹ Cf. Zeller, *op. cit.*, p. 127, note 2.

at a concept, that is, at an idea of the unalterable nature of the subject discussed. In the *Memorabilia*¹ we find examples of the use of this inductive process, which Socrates himself named *maieutic* — in reference to the profession of his mother — because its object was to bring into life the truth already existing in the mind of the pupil.²

The whole method is *heuristic*, or a method of finding. It is an inductive process resulting in a definition. "Two things," says Aristotle,³ "are justly ascribed to Socrates, *induction* and *definition*," and the importance of the introduction of these processes cannot be overestimated.⁴ For the knowledge of things in their changeable qualities Socrates would have us substitute the knowledge of things in their unalterable natures, or essences. Pre-Socratic philosophers had, indeed, hinted at a distinction between sense-knowledge and rational knowledge, or had even gone so far as to insist that such a distinction must be recognized as the beginning of philosophy. Nevertheless, men continued to appeal to the senses, to rely on sense-impressions, or, at most, to group sense-impressions in composite images such as the poet and the rhetorician employ. It was Socrates who, by his heuristic method, first showed that sense-impressions and all uncritical generalizations need to be tested and controlled by criticism, because they are incomplete and exhibit merely what is accidental in the object. It was he too who, by the same method, first showed that, if our sense-impressions are grouped, not according to the exigencies of poetry and rhetoric, but according to the requirements of logic, if they are articulated into a concept representing the unalterable nature of the object, human knowledge will be built on a lasting foundation.

Contents of Socratic Teaching. Socrates applied his heuristic method to the questions of man's dignity and destiny.

¹ III, 9, 10, and IV, 2, 11.

² Cf. Plato, *Theat.*, 149 A.

³ *Met.*, XIII, 4, 1078 b, 27.

⁴ Cf. Grote, *Hist. of Greece*, VIII, 578.

1. *Physical questions* were not discussed by Socrates. For this statement we have the explicit testimony of Xenophon and Aristotle. And yet, as we shall see, Socrates studied adaptation in nature. The truth seems to be that he was opposed not so much to physical studies as to the way in which physical questions were being and had been discussed. It must, however, be added that whatever interest Socrates took in such matters was always subservient to his interest in man.

2. *Theology*. As far as we can gather from our authorities, Socrates seems to have adopted from Anaxagoras the notion of an Intelligent Cause (Νοῦς), but, going farther than Anaxagoras had gone, he proved the existence of God from the fact that there is adaptation in living organisms. In the course of his argument he formulated a principle which has served as major premise in every *teleological argument* since his time: "Whatever exists for a useful purpose must be the work of an intelligence."¹ We find, moreover, traces of the argument from *efficient cause*. If man possesses intelligence, He from whom the universe proceeds must also possess intelligence.² Nevertheless, Socrates accepted the current *mythology*, at least so far as external worship is concerned, advising in a well-known passage³ that in this matter each one should conform to the custom of his own city.

3. *Immortality*. Although Plato represents Socrates as considering dilemmatically "either death ends all things, or it does not,"⁴ there can be no doubt as to Socrates' *belief* in the immortality of the human soul. It may be that he thought the dialectical proof of the doctrine to be beyond the power of the human mind; but the depth of his personal conviction cannot for a moment be questioned.

4. *Ethics*. If Socrates taught men how to think, it was with the ultimate intention of teaching them how to live. All his philosophy culminates in his ethical doctrine. In fact, he was

¹ *Mem.*, I, 4, 2.

² *Mem.*, *ibid.*

³ *Mem.*, I, 4, 3.

⁴ *Apol.*, 40.

the first not only to establish a scientific connection between speculation and ethical philosophy, but also to give an analysis of happiness and virtue which was capable of further systematic development.

The supreme good of man is *happiness*, and by happiness Socrates meant not a mere *εὐτυχία*, which depends on external conditions and accidents of fortune, but an *εὐπραξία*, a well-being which is conditioned by good action. To attain this, man must become godlike in his independence of all external needs: he must become abstemious, for moderation is the corner stone of all virtue.¹ Yet Socrates, as is evident from the dialogues of Plato, did not carry this doctrine of moderation to the degree of asceticism. More important even than moderation is the cultivation of the mind. To be happy, one must build his happiness not on the perishable things of the external world, but on the enduring goods which are within us, on a mind free from care and devoted to the acquisition of knowledge.

For *knowledge is virtue*. This is, perhaps, the most characteristic of all Socrates' ethical doctrines, — the identification of speculative insight with moral excellence. (ὁ Σωκράτης) *ἐπιστήμης φετ' εἶναι πᾶσας τὰς ἀρετάς*.² No man intentionally does wrong, he says, for that would be intentionally to make himself unhappy. Knowledge is, therefore, the only virtue and ignorance is the only vice. Yet when Socrates comes to speak of particular instances of virtue, he leaves the high level of virtue-knowledge and descends to commonplace utilitarianism or customary morality. In the dialogues of Xenophon he almost always bases his moral precepts on the motive of utility: we should endure privations because the hardy man is more healthy; we should be modest because the punishment of the boastful is swift and sure; and so with the other virtues. This *inconsistency* is a defect which mars all the beauty of the Socratic system of ethics.

¹ *Mem.*, I, 5, 4.

² *Eudemian Ethics*, I, 5, 1216 b, 6.

Historical Position. The philosophy of Socrates is best judged in the light of the influence which it exercised on the Platonic and Aristotelian systems of thought. His pupils, Plato and Aristotle, are the best proofs of Socrates' title to a place among the world's greatest teachers. Looking at his philosophy as a body of doctrine, we find that it contains (1) a reform in philosophic method—the foundation of *induction*; (2) the first systematic inquiry into the ~~conditions of knowl-~~edge—the foundation of *epistemology*; (3) the first system of ethics—the foundation of *moral science*.

Important as were these contributions to philosophy, more important was the influence which Socrates exerted by his life and character. He appeared in an age that was tired of vain speculation and pretended wisdom, among a people then as always more apt to be impressed with concrete presentation than with abstract reasoning, and, by his many virtues, as well as by his whole-souled devotion to truth, he convinced his contemporaries that knowledge is attainable, and that a higher and nobler life may be reached through a systematic study of the human mind. By living the life of an ideal philosopher he taught his countrymen to respect philosophy and to devote themselves to the pursuit of wisdom.

CHAPTER VIII

THE IMPERFECTLY SOCRATIC SCHOOLS

Among those who felt the influence of Socratic teaching, there were some who failed to appreciate the full meaning of the doctrine of the master, and merely applied his moral precepts to practical questions; of these, the best known is Xenophon. There were two, Plato and Aristotle, who penetrated the speculative depths of Socrates' thought and developed his teaching into a broader and more comprehensive Socratic

philosophy. There were still others who, addressing themselves to one or other point of the teaching of Socrates, developed that point in conjunction with some elements borrowed from the pre-Socratic schools. These latter are known as the *imperfectly Socratic philosophers*. The following is a conspectus of the imperfectly Socratic schools, showing their derivation :

Socratic dialectics	$\left\{ \begin{array}{l} \text{Megarian or Eristic School (Euclid) — Eleatic} \\ \text{— element.} \\ \text{Elean School (Phædo) — Eleatic element.} \end{array} \right.$
Socratic ethics	$\left\{ \begin{array}{l} \text{Cynics (Antisthenes) — borrowed from Gorgias.} \\ \text{Hedonists (Aristippus) — borrowed from Protagoras.} \end{array} \right.$

Megarian School. The Megarian school, to which Euclid and Stilpo belonged, made Eleatic metaphysics the basis of a development of Socratic ethics.

EUCLID

Life. Euclid of Megara, the founder of this school, was a disciple of Socrates, and if the story told by Gellius¹ be true, was so devoted to his teacher that, at a time when all Megarians were forbidden under pain of death to enter Athens, he would often steal into that city in the obscurity of evening in order to sit for an hour and listen to “the old man eloquent.”

Sources. We have no primary sources of information concerning the Megaric school, and our secondary sources are few and unsatisfactory. Schleiermacher, however, has shown² that the philosophers alluded to in Plato's *Sophistes*³ are the Megarians. If we make use of this passage of Plato, we have the following points of doctrine.

DOCTRINES

The-Starting Point. The Megarians started with the Socratic doctrine of concepts. If intellectual knowledge is knowledge through concepts, then the concept represents that part of a thing which never changes.

¹ *Noctes Atticæ*, VI, 10.

² Cf. Zeller, *Socrates*, p. 257.

³ 242 B.

The Development. Granted now that, as Parmenides taught, change and Becoming are inconceivable, it follows that the unchangeable essences which concepts represent, the bodiless forms (*ἄσώματα εἶδη*), are the only reality, and that the world of sense-forms is an illusion. Connected with this denial of Becoming is the assertion that *the actual alone is possible*. For this we have the express testimony of Aristotle.¹

The Doctrine of the Good. The union of Socratic and Eleatic elements is further apparent in the Megaric doctrine of the good. The good, according to Socrates, is the highest object of knowledge. Being, too, as the Eleatics taught, is the highest object of knowledge. Euclid, therefore, considered himself justified in transferring to the good all that Parmenides had said about Being: the good is one, knowledge of the good is the only virtue, though called by various names, — prudence, justice, etc. The good is immutable; it is *insight, reason, God*. It alone exists.²

Eristic Method. In order to defend their views the Megarians availed themselves of the *indirect method of proof*, following in this the example of Zeno. This method consists in refuting the arguments or hypotheses of one's opponent and thus, indirectly, establishing one's own thesis. Later, however, the followers of Euclid exceeded all precedent in their use of this method of strife, and vied with the worst of the Sophists in captious quibbling.

Historical Position. This one-sided Socraticism takes for its starting point the Socratic dialectic of concepts, which it develops in union with Eleatic doctrines by means of the method introduced by Zeno of Elea.

The Elean School. This school, founded by Phædo, the disciple of Socrates so often mentioned in the Platonic dialogues, is virtually a branch of the Megarian school. It was removed

¹ *Met.*, IX, 3, 1046b, 29.

² *Diog. Laer.*, II, 106.

from Elis to Eretria by Menedemus (died about 270 B.C.) and was henceforth known as the *Eretrian school*. Its doctrines are practically identical with those of Euclid.

The Cynics. The doctrines of the Cynics were developed from Socratic ethics which were combined with certain dialectical and rhetorical elements derived from the Eleatics and from Gorgias the Sophist.

ANTISTHENES

Life. Antisthenes, the first of the Cynics, was born at Athens about the year 436 B.C. Early in life he associated himself with the Sophists, becoming, according to Diogenes Laertius,¹ a disciple of Gorgias. When, therefore, after the death of Socrates, for whose teaching he had abandoned the company of the Sophists, Antisthenes set up a school of his own, he was merely returning to his old profession. The school which he established met in the gymnasium of Cynosarges, whence, according to some writers, comes the name of the school, although it is not less probable that the name was originally a nickname (κύνες) given to the Cynics because of their well-known disregard for social conventionalities. Indeed, it is said that Antisthenes, who happened to resemble Socrates in personal appearance, imagined that he heightened the resemblance by perverting the Socratic doctrine of moderation and abstemiousness into something bordering on a savage indifference to everything decent. He must not, however, be held accountable for the extravagances of the later Cynics. Of these the best known are **Diogenes** of Sinope, **Crates**, **Menedemus**, and **Menippus**.

Sources. Our knowledge of the doctrines of the Cynics is derived entirely from secondary sources. Chief among these are *Diogenes Laertius*, *Stobæus*, *Sextus Empiricus*, and some of the Church Fathers, such as *Clement of Alexandria*.

DOCTRINES

The Cynics were opposed to all culture except in so far as culture may be made to foster virtue. They were likewise opposed to logical and physical inquiries, though they themselves could not wholly avoid such questions. They strove, however, to make their logic and physics subservient to the

¹ Diog. Laer., VI, 1.

investigation concerning virtue, which they considered to be the paramount problem of philosophy.

Logic. According to Antisthenes, definition is the expression of the essence of a thing. The only definition, however, which Antisthenes admits, is the setting forth of the component parts of a thing. The simple cannot be defined.¹ He opposed the Platonic theory of ideas, using, it is said, the following argument: ὁ Πλάτων, ἵππον μὲν ὀρώ, ἵππότητα δὲ οὐχ ὀρώ; to which Plato is said to have answered, "What you say is true, for you possess the eye of the body with which you see the horse, but you lack the mental eye by which the concept of horse is perceived."² Antisthenes, then, believed that *the individual alone is real*. From which it follows that identical judgments alone are valid: everything should receive its own name and no other: we may say man is human, or the good is good; but we may not say that man is good, whence, as Aristotle³ and Plato⁴ expressly tell us, the Cynics concluded that contradiction is impossible, and that *all propositions are equally true*. The practical import of this *nominalism* is seen in the use which the Cynics made of the dialectical method of the Sophists.

Ethics. According to Socrates, virtue is the highest good: according to Antisthenes, *virtue is the only good*, and vice is the only evil. Everything else — riches, honors, freedom, health, life, poverty, shame, slavery, sickness, and death — is indifferent. The greatest of all errors is to suppose that pleasure is good: "I had rather be mad," Antisthenes said, "than be glad."⁵ Now, the essence of virtue is *self-control*, that is, independence of all material and accidental needs. Against all the needs of body and mind the Cynics strove to harden themselves by renouncing not only pleasure and comfort, but also family, society, and religion. *The virtuous man is truly wise*. He

¹ Diog. Laer., VI, 3.

² Cf. Simplicius, quoted by Zeller, *Socrates*, p. 300.

³ *Met.*, V, 29, 1024 b, 32.

⁴ *Cratyl.*, 37.

⁵ Diog. Laer., VI, 104.

alone is godlike. Wisdom is an armor which no temptation can pierce, a fortress that cannot be assailed. Consequently, he who has once attained wisdom can never cease to be virtuous.

Historical Position. The philosophy of the Cynics is a one-sided development of Socratic teaching. The direction which this development took was due less to the logical exigencies of the Socratic premises from which it was deduced than to the peculiar character of the founder of the school. Antisthenes was by temperament narrow-minded and obstinate, impervious to culture, a man of strong will but of mediocre intellectual ability. He was, we are told, rebuked by Plato for his lack of polish. The ostentatious asceticism which he introduced degenerated, as time went on, into positive indecency, and it was not until Stoicism appeared and absorbed what was left of the Cynic school that mental culture was restored to its place in practical philosophy.

Cyrenaic School. This school is called *Hedonistic*, from the prominence which it gave to the doctrine that pleasure is the only good; it is also called *Cyrenaic*, from the city of Cyrene, where it first appeared.

ARISTIPPUS

Life. Aristippus, to whom the fundamental doctrines of the school are traced, was born at Cyrene about the year 435 B.C. This date, however, is by no means certain. Attracted by the personal character of Socrates, he went to Athens in order to become a member of the Socratic school; he had previously made acquaintance with the doctrines of the Sophists through the writings of Protagoras. After the death of Socrates, he taught in several cities; indeed, he seems to have spent a great part of his life wandering about without any fixed abode, although it is probable that in his old age he returned to his native city and there established his school. Among the disciples of Aristippus, the best known are his daughter *Arete* and his grandson *Aristippus the Younger*, or *the mother-taught*.

Sources. The history of the Cyrenaic philosophy, like that of the teaching of the Cynics, is based on secondary authorities, chiefly on the works

of *Diogenes*, *Cicero*, *Sextus Empiricus*, and *Clement of Alexandria*. We possess none of the writings of the earlier Cyrenaics. Indeed, it is sometimes even questioned whether it was Aristippus, the founder of the school, or his grandson, the mother-taught, who first reduced the Cyrenaic doctrines to a system.¹

DOCTRINES

The attitude of the Cyrenaics towards the study of logic and physics was one of hostility. They agreed with the Cynics in regarding all speculation as idle, unless it had reference to the study of ethics, by which the happiness of man is secured, but they differed from them in their attempt to define the nature of happiness. For the Cynic, virtue is the only happiness; for the Cyrenaic, pleasure is a good in itself, and virtue is good only as a means to enjoyment.

The central doctrine of Hedonism is, therefore, that pleasure and *pleasure alone constitutes the happiness of man*. For, the Cyrenaic argued, after the manner of Protagoras, "that is true which seems to be true: we can know only the feelings or impressions which things produce upon us; of things in themselves we can know nothing." The production, therefore, of certain feelings is all that we can accomplish by action. Consequently, that is good which can produce in us the most pleasant feelings.²

Pleasure was defined by the Cyrenaics as *gentle motion*. It is, however, at least an inaccuracy on Cicero's part when he says that by pleasure the Cyrenaics understood mere bodily pleasure. Aristippus explained his pleasure doctrine in terms which are descriptive of mental emotion as well as of bodily enjoyment. It is true that the Cyrenaics spoke of pleasure as consisting in gentle motion. Our word *emotion* would, perhaps, convey their meaning much better than the word commonly employed. On

¹ Cf. Zeller, *Socrates*, p. 345, n.

² Cicero, *Academica*, II, 46, and Sext., *Mathem.*, VII, 191.

the other hand, it must be admitted that, according to Cyrenaic principles, all pleasure is conditioned by bodily pleasure, or at least by organic states. This is implied in the theory of knowledge which the Cyrenaics derived from the teaching of Protagoras. We must be careful, moreover, to distinguish between the Hedonism of Aristippus, who by "pleasure" denoted a passing emotion, and the Hedonism of his later followers, who understood by "pleasure" something akin to the Epicurean notion of a state, or permanent condition, of *painlessness*.

Pleasure, then, is the only good. Knowledge, culture, and even virtue are desirable only as means by which pleasure is attained. Virtue restrains us from that excess of emotion which is passion: passion, being violent, is painful and, on that account, to be avoided.¹ We should possess our pleasures without being possessed by them: *ἔχω, οὐκ ἔχομαι*, as Aristippus said. So, too, a man of sense will obey the laws of the country and conform to the usages of society because he judges that his failure to do so would result in a preponderance of pain over pleasure.

Diogenes Laertius² gives an account of the later Cyrenaics who, like Theodorus and Hegesias, deemed it necessary to tone down the crudities of Hedonism as taught by Aristippus. Theodorus maintained that man's highest happiness is a *state of cheerfulness* (*χαρά*), while Hegesias, called the Death-Persuader, taught that the aim of man's actions should be to attain a state of *indifference* to all external things. In this final form it was easy for Hedonism to pass over into the Stoic school.

Historical Position. The development of the Cyrenaic philosophy, like that of the Cynic doctrine, was due more to the personal character of the founder of the school and to the social atmosphere of the city where the school was founded than to the requirements of the Socratic system from which it arose. Socrates, it is true, taught that happiness is the aim of action (*eudæmonism*), but the doctrine that happiness consists in momentary

¹ Cicero, *De Officiis*, III, 33, and Diog. Laer., II, 91.

² II, 93 and 98.

pleasure is Socraticism woefully perverted. "Know thyself" was the gist of Socratic teaching. "Yes, know thyself," taught Aristippus, "in order that thou mayest know to what extent thou canst indulge in the pleasures of life without exceeding the limit where pleasure becomes pain." The application is, surely, more in accord with the materialistic subjectivism of the Sophists than with the Socratic principles from which the Cyrenaic philosophy claimed to be derived.

Retrospect. The imperfectly Socratic schools grew up side by side, without any affiliation to one another. They are thus relatively independent, each carrying out along its own line of development some point of Socratic teaching. They are essentially incomplete, because they are based on an imperfect understanding of the spirit of Socratic philosophy. Still, their influence, immediate and mediate, on subsequent thought must not be underestimated. The Megarians, in their doctrine of bodiless forms, foreshadowed the Platonic theory of Ideas, and both Antisthenes and Aristippus influenced the Platonic doctrine of the highest good. But important as was their immediate influence, the mediate influence of these schools was still more important. The age of Socrates was one that called for great constructive efforts; it was an age that could appreciate Plato and Aristotle, rather than Aristippus and Antisthenes. Later, however, there came a time when the political condition of Greece was such that men could well be persuaded to withdraw from the world of sense, from the problems of Being and Becoming, in order to adopt a self-centralized culture as the only means of happiness. It was then that the influence of the imperfectly Socratic schools was felt. The Stoa adopted substantially the moral teachings of the Cynics, the Scepticism of Pyrrho and the Academies sprang from the doctrines of the Megarians, while the school of Epicurus renewed hedonistic ethics by teaching a system identical in its principal tenets with the philosophy of the Cyrenaics.

There is thus no continuity of development through these intercalary schools to Plato and Aristotle. Plato, entering into the spirit of Socratic philosophy more fully than the imperfect disciples had done, expanded the Socratic doctrine of concepts into the theory of Ideas, and gave to Socratic ethics a broader foundation and a more enduring consistency.

CHAPTER IX

PLATO

Life. Plato was born at Athens some years after the beginning of the Peloponnesian War. The exact year of his birth is unknown, but 427 or 428 B.C. is the most probable date. His father's name was Aristo; his mother, Perictione, was descended from Dropides, a near relative of Solon. Plato was originally called Aristocles, Πλάτων being a nickname given by his master in gymnastics on account of his broad build.

Concerning his early life we do not possess much reliable information. We may, however, presume that he profited by all the educational advantages that were within the reach of a noble and wealthy Athenian youth. Zeller¹ calls attention to three circumstances which had a determining influence on the development of Plato's mind. The first of these was the political condition of Athens. The city was just then experiencing the full effects of demagogic rule, and the conditions at home and abroad were such that the mind of the aristocratic young student naturally turned towards idealistic schemes of state organization, schemes which were later to find expression in *The Republic*. The second circumstance is the fact that in early life Plato devoted much attention to poetry, composing poems of no mean artistic value. These early studies were not without effect on his philosophy; they influenced the entire spirit of his system as well as the language, so remarkable for its grace and beauty, in which that system was set forth. Indeed, it is true, in a sense, that Plato became a philosopher without ceasing to be a poet. The circumstance, however, which was most decisive in determining the life and philosophy of Plato was the personal influence of Socrates; for though he had studied the doctrines of Heraclitus under Cratylus, his philosophical training may be said to date from his first meeting with Socrates.

¹ *Plato*, etc., pp. 7 ff.

After the death of Socrates, Plato, who had spent about eight years as disciple, began his travels preparatory to establishing a school of his own. He first repaired to Megara,¹ where some of the disciples of Socrates were gathered under the leadership of Euclid. Thence he went to Italy to obtain a more intimate acquaintance with the doctrines of the Pythagoreans. The exact order of his subsequent journeys is not certain ; still, there is no reason to doubt that he visited Egypt, although the tales that are told of the vast stores of learning which he acquired in that country are far from reliable. We may accept as true the story of his journeys to Sicily, and of his relations with the elder Dionysius, who sold him into slavery, as well as with Dionysius the younger, whom he tried to convert to his Utopian scheme of state government.

It was after his first journey to Sicily that Plato began his career at Athens as a teacher. Imitating his master, Socrates, he gathered round him the young men of the city, but, unlike Socrates, he refused to teach in the public squares, preferring the retirement of the groves near the gymnasium of Academus. There he met his disciples, conversing with them after the manner of Socrates, though it is natural to suppose that in his style as well as in his choice of illustrations he departed from the Socratic example of studied plainness. On his return from his third journey to Sicily, Plato took up his residence permanently in Athens, and thenceforth devoted himself unremittingly to teaching and writing. He lived to the age of eighty, dying in the midst of his intellectual labors. If Cicero's story be true,² he died in the act of writing ; according to another tradition prevalent in ancient times, he died at a wedding feast.

Plato's Character. Even in antiquity, the character of Plato was violently assailed. His dealings with Socrates and afterwards with his own disciples, his visits to Sicily, his references to the philosophical systems of his predecessors, were all made the pretext for accusations of self-assertion, tyranny, flattery of tyrants, plagiarism, and willful misrepresentation. His aristocratic ways and his disdain of the ostentatious asceticism of the Cynics served as the basis for charges of love of pleasure and immorality. The evidence on which all these accusations rests is of the flimsiest nature, while, on the contrary, everything that Plato wrote bears testimony to the lofty nobility of the man. The truth is that Plato's character was not easily understood. When the idealism and poetic temperament which were his by instinct and early training broke loose from the restraint of Socratic

¹ Some historians doubt the accuracy of this statement, which rests on the authority of Hermodorus, a disciple of Plato. Cf. Zeller, *op. cit.*, p. 14, note 26.

² Cf. Cicero, *De Senectute*, V, 13.

influence, he was merely realizing in his personal character the ideal of Greek life — an ideal which, by reason of its many-sidedness, was a contradiction and a scandal to the narrow-minded advocates of asceticism and abstemiousness. The importance which Plato attached to a larger culture was taken by the Cynics and his other adversaries as a sign that he had abandoned, whereas he was in reality but rounding out and perfecting, the Socratic idea of what a philosopher ought to be.

Plato's Writings.¹ We are fortunate in possessing all the genuine works of Plato. The so-called Platonic dialogues which are spoken of as lost are certainly spurious. The *Divisions* mentioned by Aristotle is neither a Platonic nor an Aristotelian treatise; the *ἄγραφα δόγματα*, of which Aristotle also makes mention, is most likely a collection of the views which Plato himself had not committed to writing, but which some disciple collected for the use of the school.

While nothing that Plato wrote has been lost, it is by no means easy to determine how many of the thirty-six dialogues that have come down to us are undoubtedly authentic. With respect to *Phædrus*, *Protagoras*, *The Banquet*, *Gorgias*, *The Republic*, *Timæus*, *Theætetus*, and *Phædo*, there can be no reasonable doubt. Others, like *Parmenides*, *Cratylus*, *The Sophist*, are not so certainly genuine; while in the case of *Minos*, *Hippiarchus*, etc., the balance of evidence is against their authenticity.²

Next comes the question of the *order* or *plan* of the Platonic dialogues. Ueberweg mentions the three principal theories held by scholars. They are (1) that Plato wrote according to a definite plan, composing first the *elementary* dialogues, then the *mediatory*, and finally the *constructive* discourses; (2) that he had no definite plan, but that the dialogues represent the different stages in the development of his mind; (3) that he deliberately portrayed in his dialogues the several stages in the life of Socrates, the ideal philosopher. Zeller, however, very sensibly remarks³ that the question has been argued too much on *a priori* grounds, and suggests that the first thing to do is to determine the order in which the dialogues were written — a task that is by no means easy.

¹ Cf. Ueberweg, *History of Philosophy*, English trans., pp. 108 ff.

² The paging employed in citations from Plato's *Works* is that of the Stephanus edition (Paris, 1578). This paging is preserved in the more recent editions, for example, Bekker's (Berlin, 1816-1823), Didot's (Paris, 1846 ff.), and also in Jowett's translation (*The Dialogues of Plato*, Oxford, 1871; third edition, New York and London, 1892). For general bibliography, cf. Weber, *op. cit.*, p. 77, n.; Ueberweg, *op. cit.*, p. 117; to these lists add Ritchie, *Plato* (New York, 1902).

³ *Plato*, pp. 118 ff.

The form of the Platonic writings is, as is well known, the dialogue; the reasons why Plato adopted this literary form are not far to seek. In the first place, he was influenced by the Socratic method; secondly, he was poet enough to recognize the dramatic effect of which the dialogue is capable, and the room which it affords for local coloring and portrayal of character. Finally, he must have recognized that the dialogue afforded him the amplest opportunity of presenting the life of the model philosopher in the words and acts of the idealized Socrates. Philosophy was for Plato a matter of life as well as of thought; "true philosophy, therefore, could only be represented in the perfect philosopher, in the personality, words, and demeanor of Socrates."

The Platonic dialogue has been well described as occupying a middle position between the personal converse of Socrates and the purely scientific continuous exposition of Aristotle.¹ Plato, adopting a stricter idea of method than Socrates adopted, excludes the personal and contingent elements which made the discourse of Socrates so picturesque; while at times, when he explains the more difficult points of doctrine, he abandons almost altogether the inductive method for the deductive, the dialogue well-nigh disappears and gives way to unbroken discourse. This is especially true of the *Timæus*.

In his use of the dialogue, Plato constantly has recourse to the *myth* as a form of expression. The poetical and artistic value of the myth is conceded by all, but it offers no small difficulty when there is question of the philosophical doctrine which it was meant to convey. Whatever may have been Plato's purpose in introducing the myth,—whether it was to elucidate by concrete imagery some abstract principle, or to mislead the unthinking populace as to his religious convictions, or to conceal the contradictions of his thought, striving to "escape philosophical criticism by seeking refuge in the license of the poet,"—there can be no doubt that the myth was intended to be a mere allegory, and Plato himself warns us against taking such allegories for truth, the shadow for the substance.

PLATO'S PHILOSOPHY

Definition of Philosophy. Plato's philosophy is essentially a completion and extension of the philosophy of Socrates. What Socrates laid down as a principle of knowledge, Plato enunciates as a principle of Being; the *Socratic concept*, which was

¹ Cf. Zeller, *op. cit.*, p. 153.

epistemological, is succeeded by the *Platonic Idea*, which is a metaphysical notion. Socrates taught that knowledge through concepts is the only true knowledge; therefore, concludes Plato, the concept, or the Idea, is the only true reality. Thus, for Plato, philosophy is the *science of the Idea*, or, as we should say, of the unconditioned basis of phenomena.

In the *Phædrus*¹ Plato describes how the soul, at sight of singular phenomena, is moved to a remembrance of its heavenly home and of the archetypes which it contemplated in a previous existence, and of which it now beholds the imperfect copies. Thereupon, the soul, falling into an ecstasy of delight, wonders at the contrast between the *Idea* (archetype) and the *phenomenon* (copy), and from this wonder proceeds the impulse to philosophize, which is identical with the impulse to love. For, while it is true that there is a contrast between every Idea and its phenomenon, the contrast is more striking in the case of the *Idea of the beautiful*, this Idea shining through its visible copies more perfectly than any other Idea. Philosophy, then, is the effort of the human mind to rise from the contemplation of visible copies of Ideas to the knowledge of Ideas themselves.

To the question, How is this knowledge of Ideas to be attained? Plato answers, By means of dialectic—to this all other training is preliminary. Plato, moreover, is careful to distinguish between *knowledge* (ἐπιστήμη) and *opinion* (δόξα), so that, when he defines philosophy as knowledge, we must understand him to speak of knowledge in the stricter sense of the term.²

Division of Plato's Philosophy. Plato, unlike Aristotle, neither distinguished between the different parts of philosophy, nor made each part the subject of a separate treatise. Still, the doctrines found in the dialogues may be classed under the three heads of *Dialectic*, *Physics*, and *Ethics*—a division which, according to Cicero, was made by Plato himself, although it is more probable

¹ *Phædrus*, 250.

² Cf. *Gorgias*, 454 D; *Meno*, 97 E.

that it was first formulated by Xenocrates, as Sextus¹ says. Under the title *Dialectic* it is customary to include not only logic, but also the doctrine of Ideas. Under the division *Physics* are comprised Plato's doctrine concerning the world of phenomena in general, his teaching regarding the relation between Idea and phenomenon, his cosmogenetic theories, his notions of matter, space, and so forth. Finally, under *Ethics* are included not only questions which belong to the science of morals, but also the political doctrines which play so important a part in the Platonic system.

Dialectic.² It would be idle to look to Plato for a system of *logic*. We find, indeed, that he mentions certain *laws of thought*, but he enunciates them as *laws of being*, making them serve a metaphysical rather than a logical purpose.³ It is owing, perhaps, to this tendency of Plato's mind towards the metaphysical view that *definition* and *division* receive more of his attention than do the other problems of logic; dialectic, he teaches, is concerned (as is every part of philosophy) with the Idea, or, more explicitly, dialectic has for its object to reduce what is manifold and multiple in our experience of phenomena to that unity of concept which belongs to a knowledge of Ideas, and, furthermore, to establish an organic order among the concepts thus acquired. Dialectic has, therefore, the double task of defining universal concepts by *induction* (*συναγωγή*) and classifying them by *division* (*διαίρεσις*).⁴

Definition and division together with some remarks on the problem of language are the only logical doctrines to be found in the dialogues. Dialectic, however, includes, besides logical doctrines, the *theory of Ideas*, which is the center of all Platonic thought; for dialectic is the doctrine of the Idea in itself, just as physics is the doctrine of the Idea imitated in nature, or as

¹ *Mathem.*, VII, 16.

² Cf. Lutoslawski, *Origin and Growth of Plato's Logic*, etc. (London, 1897).

³ Cf. *Phædo*, 100 A; *Tim.*, 28 A.

⁴ Cf. *Phædrus*, 265 E.

ethics is the doctrine of the Idea imitated in human action. Under the title of *Dialectic*, therefore, the theory of Ideas is studied; it includes the following questions: (1) *origin of the theory of Ideas*; (2) *nature and objective existence of the Ideas*; (3) *their expansion into plurality: formation of the world of Ideas*.

1. *Origin of the theory of Ideas*. The theory of Ideas, as has been remarked above, is a natural development of the Socratic doctrine of concepts. Knowledge, as distinct from opinion, is the knowledge of reality. Now, Socrates taught that in order to know a thing it is necessary and sufficient to have a concept of that thing. Therefore, the concept, or Idea, is the only reality.¹ To deny that the Idea is a reality is to deny the possibility of scientific knowledge.

Such is the first and most immediate derivation of the theory of Ideas. Starting from Socratic premises, Plato argues that the theory of Ideas is the only explanation of the objective value of scientific knowledge. Elsewhere, however, as in the *Philebus*,² he derives the doctrine of Ideas from the failure of Heraclitus and the Eleatics to explain Being and Becoming. Heraclitus was right in teaching that Becoming exists; he was wrong in teaching that Being does not exist. The Eleatics, on the contrary, were right in teaching that Being is, but they were wrong in teaching that Becoming is not. The truth is that both Being and Becoming exist. When, however, we come to analyze Becoming, we find that it is made up of Being and not-Being. Consequently, in the changing world around us, that alone is real which is unchangeable, absolute, one, namely the Idea. For example, the concrete, changeable *just* is made up partly of what we would call the contingent element, the element of imperfection, of not-Being, and partly of the one immutable Idea, *justice*, which alone possesses real being. To say, then, that the Idea of justice does not exist is to say that *the just* (a just man

¹ Cf. *Tim.*, 51.

² *Phileb.*, 54 B.

or a just action) is all not-Being and has no reality. And what is said of justice may be said of any other Idea. The Idea is the core of reality underlying the surface qualities which are imperfections, *i.e.*, unrealities.

Thus the reality of Being and the reality of scientific knowledge demand the existence of the Idea, and this *double aspect* of the Idea is never absent from Plato's thought: the Idea is a necessary postulate if we maintain, as we must maintain, the reality of scientific knowledge and the reality of Being. These are the two roads that lead to the Idea,—the Socratic doctrine of concepts and the problem of Being and Becoming, a problem that was stated, though not satisfactorily solved, by Heraclitus and the Eleatics.¹

Besides these philosophical principles which led to the theory of Ideas, there existed in the mind of Plato what may be called a temperamental predisposition to adopt some such theory as the doctrine of Ideas and by means of it to explain knowledge and reality; for Plato was a poet and in him the *artistic sense* was always predominant. He was a Greek of the Greeks, and the Greek even in his mythology loved clearly cut, firmly outlined forms, definite, visible shapes. It was natural, therefore, for Plato not merely to distinguish in things the permanent element which is their Being and the object of our knowledge, but also to extract, as it were, this element from the manifold and changeable in which it was embedded, and to hypostatize it, causing it to stand out in a world of its own, in all its oneness and definiteness and immutability.

2. *The nature and objective existence of the Ideas.* From what has been said, it is clear that the Idea is the element of reality in things—the one uniform, immutable element, unaffected by multiplicity, change, and partial not-Being. The expressions which Plato uses to describe the Idea always imply one or several of these attributes. For instance, he calls it

Μονον

¹ Cf. Arist., *Met.*, I, 6, 987 a, 29.

οὐσία, αἰδῖος οὐσία, οὕτως ὄν, παντελῶς ὄν, κατὰ ταῦτα ὄν, αἰ κατὰ ταῦτα ἔχον ἀκινήτως, etc. The name, however, by which the Idea is most commonly designated is εἶδος, or ἰδέα, which primarily denotes something objective, though in a secondary sense the Platonic Idea is also an idea in our meaning of the word, a concept by which the object is known. But whether the Idea be considered subjectively or objectively,—and the objective aspect is always to be considered first,—it is essentially universal, or, to use Aristotle's phrase, ἐν ἐπὶ πολλῶν. We may call it the *universal essence* if we are careful to dissociate from the word *essence* the meaning of something existing in things; for nothing is clearer than that Plato understood by the Idea something existing apart from (χωρίς) the phenomena which make up the world of sense. The Idea transcends the world of concrete existence; it abides in the heavenly sphere, in the τόπος νοητός, where the gods and the souls of the blessed contemplate it. It is described in the *Phædrus*¹ as follows: "Now of the heaven which is above the heavens no earthly poet has ever sung or ever will sing in a worthy manner. But I must tell, for I am bound to speak truly when speaking of the truth. The colorless and formless and intangible essence is visible to the mind, which is the only lord of the soul. Circling around this in the region above the heavens is the place of true knowledge." In *The Banquet*² the Idea of beauty is described as "beauty only, absolute, *separate*, simple, and everlasting."

✓ There can be no doubt, therefore, that Plato separated the world of Ideas from the world of concrete existence. He hypothesized, so to speak, the Idea, and it was against this separation (χωρίζειν) of the Idea that Aristotle directed his criticism of Plato's theory. According to Aristotle, the Platonic world of Ideas is a world by itself, a prototype of the world which we see, and in this interpretation Aristotle is supported and sustained by all the later Scholastics. It is no longer seriously

¹ *Phædrus*, 247.

² *Ibid.*, 210.

maintained that the Platonic Ideas exist merely in the human mind. More worthy of consideration is the view of St. Augustine, who, following the example of early Christian Platonists, identifies the world of Platonic Ideas with *the mind of God*. This view, supported as it is by the authority of some of the greatest of Christian philosophers as well as by that of the later Platonists and of all the Neo-Platonists, is not lightly to be set aside. On the other hand, the statements of Aristotle¹ are explicit, and we must remember that Aristotle was an immediate disciple of Plato; we have no reason to suppose that he willfully misrepresented his master in this most important point, and we have every reason to believe that he was fully capable of understanding his master's teaching.²

So far the Idea has been described as the objective correlative of our universal concept; but while the universality of our concepts is a product of dialectical thought, the universality of the Idea is *objective*, that is, independent of the human mind. This objective universality is explained in the *Sophist*,³ in which Plato attacks the Eleatic doctrine of the oneness of Being, maintaining that the Idea is at the same time *one* and *many*. But how are the unity and multiplicity of the Idea to be reconciled? Plato answers that they are reconciled by the *community* (*κοινωνία*) of concepts. As a concept, for example Being, is differentiated into its determinations, such as motion and rest, so in the objective order (as Plato shows in the *Parmenides*⁴ by a more cogent process of direct argument) the Idea is identical with another thing (*τάντρον*) and at the same time is different from other things (*θάτερον*). In this way, we have *unity in plurality* and *plurality in unity*. A Scholastic would say that the fundamental unity of the subject is not incompatible with the formal multiplicity of its qualities, and while this is not precisely

¹ *Met.*, I, 9, 990 b; XIII, 4, 1078; *Phys.*, IV, 2, 209b, *et alibi*.

² For bibliography, *cf.* Ritter and Preller, *op. cit.*, p. 244, note d.

³ *Cf.* especially 256.

⁴ *Parm.*, 137.

what Plato meant, it is certainly a better illustration of Plato's meaning than is the Neo-Platonic interpretation, according to which by Ideas Plato meant numbers. It is, however, very likely that Plato did not clearly understand how unity and multiplicity could belong to the Idea.

Just as Plato attacked the Eleatic doctrine of the oneness of Being so did he¹ attack the Eleatic doctrine of immobility. *The Idea is active*, for, if it were inert, it would be capable neither of being known by us nor of constituting reality; and to cause things to be known and to constitute their reality are, so to speak, the two functions of the Idea. Not only is the Idea described as active,² but even as *the only true cause*. In a remarkable passage,³ Socrates is represented as saying that he was dissatisfied with the speculations of the Physicists, that he was disappointed in his hope that Anaxagoras would explain the origin of things, and that he finally discovered that Ideas are the only adequate causes of phenomena. Aristotle, therefore, is right in saying⁴ that he knew of no efficient causes in the doctrine of Plato except Ideas, and thus we are forced to accept without attempting to explain the Platonic doctrine that Ideas, without being caused, are causes; that although they are not subject to Becoming, they are the power by whose agency all phenomena become. Still, in justice to Plato, it should be remembered that while he maintains the dynamic function of the Ideas, holding them to be living powers, he is primarily concerned with their static, or plastic, function, inasmuch as they are the forms, or types, of existing things.

3. *The world of Ideas*. Plato hardly ever speaks of the Idea, but always of Ideas in the plural, for there is a world of Ideas. Indeed, we may say that for Plato there are three worlds: the world of concrete phenomena, the world of our concepts, and the world of Ideas (*κόσμος*, or *τόπος*, *νοητός*). The relation

¹ *Sophis.*, 248.

² *Phædo*, 96 ff.

³ *Phædo*, *loc. cit.*

⁴ *Met.*, I, 9, 991, 992; *De Gen. et Corr.*, II, 9, 335 b.

between the first and third of these worlds will be discussed later under the head of Physics. The relation between the world of concepts and the world of Ideas lies in the fact that the former is the faint reflection of the latter. This is how Plato would describe it ; in modern terminology we should say the world of Ideas is the logical and ontological *prius* of the world of concepts. But, however we view the relation between the two worlds, it cannot be denied that there is at least a *parallelism* between them. To every concept corresponds an Idea, and to the laws of thought which rule the world of concepts correspond the laws of Being which rule the world of Ideas.

In the first place, just as our concepts are many, the Ideas are many. Everything has its Idea, — what is small and worthless as well as what is great and perfect. Products of art as well as objects of nature ; substances, qualities, relations, mathematical figures, and grammatical forms, — all these have their Ideas.¹ That alone has no Idea which is mere Becoming. The number of Ideas, then, is indefinite.

In the second place, our concepts possess a logical unity, and so in all the multiplicity of Ideas there is *a unity which may be called organic*. The Ideas form a series descending in well-ordered division and subdivision from the highest genera to the individual, and it is the task of science to represent this series, — to descend in thought from the one to the multiple. Plato himself² attempted to perform this task, naming, as the most universal Ideas, *Being and not-Being, like and unlike, unity and number, the straight and the crooked*, — an attempt which suggests on the one hand the ten opposites of the Pythagoreans and on the other hand the ten Aristotelian categories. The classification is of course incomplete.

Of greater importance than this incomplete enumeration of the highest kinds of Ideas is Plato's doctrine of the supremacy of the *Idea of good*. As in the material universe the sun is the

¹ Cf. *Parm.*, 130.

² *Theat.*, 184, 186.

source of light and life, illumining the earth and filling every part of it with life-producing warmth, so in the supersensible world of Ideas the Idea of good is the light and life of all the other Ideas, causing them both to be and to be known.¹ But what does Plato mean by this Idea of good? Is it merely the absolute good, acting as final cause, the goal of human activity, the ultimate end of all things? If this were Plato's meaning, the good might be defined as a final cause; it could not be defined as efficient cause, and it certainly is so described.² Moreover, in the *Philebus*³ the good is identified with divine reason. The only rational interpretation, therefore, of Plato's doctrine of the good is that by the Idea of good Plato meant God Himself. It is true that for us who are accustomed to represent the Deity as a person, it is not easy to realize how Plato could hypostatize a universal concept and call it God, or how he could conceive the source of life and energy to be intelligent, and yet describe it in terms inconsistent with self-consciousness. The correct explanation seems to be that the relation between personality and intelligence did not suggest itself to Plato. Not only he, but the ancient philosophers in general, lacked a definite notion of what personality is. Plato, it must be understood, did not deny the personality of God. Indeed, he often speaks of God as a person. He was simply unconscious of the problem which suggests itself so naturally to us, How to reconcile the notion of personality with the Idea of good which he identified with God?

From the consideration of the Idea of good we are led to the next division of Plato's philosophy, namely, physics; it was because of His goodness that God created phenomena. We pass therefore, as it were, through the Idea of good, from the world of Ideas to the world of phenomena.

Physics. Under this head are included all the manifestations of the Idea in the *world of phenomena*. Now the world

¹ Cf. *Rep.*, VI, 508.

² Cf. *Rep.*, *loc. cit.*

³ *Phileb.*, 22 C.

of phenomena is the world of sense-presentation, the region of change and multiplicity and imperfection and, therefore, of partial not-Being. It presents a striking contrast to the world of Ideas, which stands "in viewless majesty" above it, and where there is no change, no imperfection, no not-Being. Yet these two worlds have something in common: there is a *contact* (κοινωνία) of the lower with the higher, for the phenomenon *partakes* (μετέχει) of the Idea.¹ Thus the *concrete good* (good men, good actions) partakes of the *absolute good*: a horse or a fire in the concrete world partakes of the horse-in-itself or of the fire-in-itself which exists in the world of Ideas. In the *Parmenides*² the participation is explained to be an *imitation* (μίμησις), the Ideas being *prototypes* (παρδείγματα) of which the phenomena are ectypes, or *copies* (εἰδωλα). This participation is, however, so imperfect that in beauty and luster and grandeur the world of phenomena falls far short of the world of Ideas.

1. Whence, we are forced to ask, comes this imperfection, this partial not-Being? For answer, Plato is obliged to assume a principle directly antithetical to the Idea. He does not call this principle *matter*, the word ὕλη being first used in this sense by Aristotle; and it is a mistake to interpret Plato's thought as if by the principle of imperfection he meant a material substratum of existence. The phrase by which it is designated varies in the different dialogues; it is called, for example, *space* (χώρα), *mass* (ἐκμαγεῖον), *receptacle* (πανδεχές), the *unlimited* (ἄπειρον), and, according to some interpreters, it is *not-Being* (μὴ ὄν), and the *great and small*. It is described in the *Timæus*³ as that in which all things appear, grow up, and decay. Consequently, it is a negative principle of limitation, more akin to space than to matter, and Aristotle is right in contrasting⁴ his own idea of the limiting principle with that of Plato. The so-called Platonic matter is essentially a negation, whereas in

¹ Cf. Arist., *Met.*, I, 6, 987 b, 9.

³ *Tim.*, 48 ff.

² *Parm.*, 132 D.

⁴ *Phys.*, IV, 2, 209 b; *ibid.*, 210 a.

Aristotle's philosophy negation (στέρησις) is but a quality of matter.

The concept of Platonic matter is not easy to grasp. It is a mere form, yet it is not a form of the mind in any Kantian sense. It is a form objectively existing, and yet it is not a reality. Plato himself recognized the difficulty which the concept of the principle of limitation involved. In the *Timæus*¹ he tells us that it is known by a kind of *spurious reason* (λογισμῶ νόθῳ) and is hardly a *matter of belief*. The confession does not surprise us, for in this attempt to designate a limiting principle lies the fatal flaw of the whole Platonic theory. To derive the limited from the unlimited, the partial not-Being from Being, is a task which neither Plato nor Spinoza could fulfill consistently with his first assumptions. Aristotle detected this weakness in the idealistic monism of Plato, as well as in the materialistic monism of the early Physicists, and it was in order to supply the defects of both that he introduced the dualistic concept of a world which is the outcome of the potential and the actual.

Plato, therefore, failed to account satisfactorily for the derivation of the sensuous from the supersensuous world. He had recourse, as Aristotle remarks,² to such widely different expressions as *participation*, *community* (κοινωνία), *imitation*; but he must have been aware that by these phrases he evaded rather than solved the real problem. One point, however, is beyond dispute: Plato assumed that a limiting principle, the source of all evil and imperfection, exists. He assumed it, illogically, in defiance of his doctrine that the Idea is the only reality. He is, therefore, as one who would be a dualist did his premises allow him to depart from the monism which is the starting point of all his speculation.

2. In order to explain the world of phenomena, Plato was obliged to postulate, besides the Idea and the principle of limitation, the existence of a *world-soul* (Νοῦς), which mediates

¹ *Tim.*, 52.

² *Met.*, I, 6, 987 b.

between the Idea and matter and is the proximate cause of all life and order and motion and knowledge in the universe. The universe, he taught, is a living animal (*ζῶον ἔννοον*), endowed with the most perfect and most intelligent of souls, because, as he argues in the *Timæus*,¹ if God made the world as perfect as the nature of matter (the principle of limitation) would allow, He must have endowed it with a soul that is perfect. This soul is a perfect harmony: it contains all mathematical proportions. Diffused throughout the universe, ceaselessly self-moving according to regular law, it is the cause of all change and all Becoming. It is not an Idea, for the Idea is uncaused, universal, all-Being, while the world-soul is derived and particular and is partly made up of not-Being. Although it is conceived by a kind of analogy with the human soul, the question whether it is personal or impersonal never suggested itself to Plato.²

After the general problem of the derivation of the sensuous from the supersensuous world come the particular questions which belong to what we call *cosmology*. Plato himself informs us³ that since nature is Becoming rather than Being, the study of nature leads not to true *scientific knowledge* (*ἐπιστήμη*), but to *belief* only (*πίστις*). Cosmology, therefore, and physical science in general have a value far inferior to dialectic, which is the science of the pure Idea.

3. As to the *origin of the universe*: The so-called Platonic matter is eternal. The universe, however, as it exists had its origin in time. This seems to be the natural and obvious sense of *Timæus*, 28, although Xenocrates, an immediate disciple of Plato, was of opinion that Plato taught the temporal origin of the world merely for the sake of clearness — to emphasize the fact that it had an origin. Now, since matter existed from eternity, the universe was not created. From out the chaos which was ruled by necessity (*ἀνάγκη*), God, the Demiurgos, or Creator, brought order, fashioning the phenomena in matter according to

¹ *Tim.*, 30, 35.

² Cf. Zeller, *Plato*, p. 358.

³ *Tim.*, 59 C.

the eternal prototypes, the Ideas, and making the phenomena — for He was free from jealousy — as perfect as the imperfection of matter would allow. First, He produced the world-soul; then, as the sphere is the most perfect figure, He formed for this soul a spherical body composed of fire, air, earth, and water — substances which Empedocles had designated as the root principles of the world, and which are now, for the first time in the history of philosophy, called *elements*. The question, Why are the elements four in number? Plato answers by assigning a teleological as well as a physical reason,¹ thus exhibiting the two influences, Socratic and Pythagorean, which more than any other causes contributed to determine his physical theories. The four elements differ from one another by the possession of definite qualities; all differences of things are accounted for by different combinations of the elements themselves — bodies are light or heavy according as the element of fire, which is light, or the element of earth, which is heavy, prevails.

4. In his explanation of the *world-system* as it now is, Plato shows still more evidently the influence of the Pythagoreans, and especially of Philolaus.² Add to this influence the natural tendency of Plato's mind towards the idealistic and artistic concept of everything, and the doctrine that *the heavenly bodies are created gods* — the most perfect of God's creatures, from whose fidelity to their paths in the firmament man may learn to rule the lawless movements of his own soul³ — will cease to appear out of keeping with the seriousness of Plato's attempt to solve the problems of human knowledge and human destiny.

5. In Plato's *anthropological doctrines* the mixture of myth and science is more frequent and more misleading than in any other portion of his philosophy. As to the *origin of the soul*, he teaches⁴ that when the Creator had formed the universe and the stars He commanded the created gods to fashion the human

¹ Cf. *Tim.*, 31 B.

³ Cf. *ibid.*, 38 E.

² Cf. *ibid.*, 33 B.

⁴ *Ibid.*, 41 A.

body, while He Himself proceeded to form the human soul (or at least the rational part of it), taking for this purpose the same materials which He had used to form the world-soul, mixing them in the same cup, though the mixture was of inferior purity.

Plato rejects¹ the doctrine that the soul is a harmony of the body, on the ground that the soul has strivings which are contrary to the inclinations of sense, and which prove it to be of a nature different from that of the body. The soul is expressly defined² as a *self-moving principle*. It is related to the body merely as a *causa movens*. How, then, did it come to be united to the body? Plato³ answers by the "figure," or allegory, in which is conveyed the doctrine of *preëxistence*. In the *Timæus*, however, the mythical form of expression is laid aside, as when, for example,⁴ the soul is said to have been united to the body by virtue of a cosmic law.

The doctrine of preëxistence gave rise to the doctrine of *recollection*, although sometimes, as in the *Meno*,⁵ the previous existence of the soul is proved from the possibility of learning. The doctrine of recollection implies that in our supercelestial home the soul enjoyed a clear and unclouded vision of the Ideas, and that, although it fell from that happy state and was steeped in the river of forgetfulness, it still retains an indistinct memory of those heavenly intuitions of the truth; so that the sight of the phenomena — mere shadows of the Ideas — arouses in the soul a clearer and fuller recollection of what it contemplated in its previous existence. The process of learning consists, therefore, in recalling what we have forgotten: *to learn is to remember*.

If preëxistence is one pole in the ideal circle of the soul's existence, *immortality* is the other. The sojourn of the soul in the world of ever-changing phenomena is but a period of punishment which ends with the death of the body. Underlying the mythical language in which Plato conveyed his psychological

¹ *Phædo*, 93, 95.

² *Ibid.*, 246 ff.

³ *Meno*, 81.

⁴ *Phædrus*, 245 C.

⁵ *Tim.*, 41 D.

doctrines, there is a deep-seated conviction of the reality of the future life, a genuine belief in the immortality of the soul. Indeed, Plato is the first Greek philosopher to formulate in scientific language and to establish with scientific proof an answer to the question, Does death end all things? Hitherto, the immortality of the soul had been part of the religious systems of Asia and of Greece; now it appears for the first time as a scientific thesis, as part of a purely rational system of philosophy.

The dialogue which deals expressly with the problem of immortality is the *Phædo*; there Socrates is represented by the narrator as discoursing on the future existence, while the jailer stands at the door of the prison with the fatal draught in his hand. The arguments which Socrates uses may be summed up as follows:

1. Opposites generate opposites. Out of life comes death: therefore, out of death comes life.¹

2. The soul, being without composition, is akin to the absolutely immutable Idea. The body, on the contrary, is, by its composition, akin to things which change. When the body is destroyed, the soul, by virtue of its affinity to the indestructible, is enabled to resist all decay and destruction.²

3. If the soul existed before the body, it is natural to expect that it will exist after the body. That it existed before the body is proved by the doctrine of recollection.³

4. Besides these arguments, the following proof is used by Plato.⁴ The dissolution of anything is accomplished by the evil which is opposed to it. Now, moral evil is the only evil which is opposed to the nature of the soul; if, then, sin does not destroy the soul,—as it certainly does not,—the reason must be that the soul is indestructible.

Underlying all the foregoing arguments is the one pivotal thought of Plato's psychology, that *life necessarily belongs to the*

¹ *Phædo*, 70 E.

² *Op. cit.*, 78-81.

³ *Op. cit.*, 72-79.

⁴ *Rep.*, X, 609.

Idea of the soul. This thought is brought out in the last of the Socratic arguments.

5. An Idea cannot pass into its opposite, — a Scholastic would say essences are immutable. An Idea, therefore, which has a definite concept attached to it excludes the opposite of that concept. Now, life belongs to the Idea of the soul. Consequently, the soul excludes death, which is the opposite of life. A dead soul is a contradiction in terms.¹

The same *ontological argument* occurs in *Phædrus*, 245, and it is evidently the chief argument on which Plato bases his conviction that the soul is immortal. Yet in the *Phædo*, after each of Socrates' listeners has signified his acceptance of the proof, Socrates is made to agree with Simmias that there is no longer room for any uncertainty *except that which arises from the greatness of the subject and the feebleness of the human mind*.²

Closely allied with the doctrine of immortality is the doctrine of *transmigration of souls* and of *future retribution*. Plato recognized that immortality involves the idea of future retribution of some sort, just as the necessity of a future retribution involves immortality. He did not determine scientifically the precise nature of retribution in the next life. He was content with adopting the transmigration myths which he derived from the mysteries. Yet, for Plato, these myths contained a germ of truth, although the most that can be safely said is that he seriously maintained the doctrine of transmigration in a generic sense: the details so carefully set forth in the *Timæus* and in the *Phædo* are not to be taken as part of Plato's scientific thought.

When we speak of immortality we must not imagine that Plato held every part of the soul to be immortal. He enumerates three *parts of the soul*, — the *rational* (λόγος), the *irascible* (θυμός), and the *appetitive* (ἐπιθυμία) parts. These are not faculties or powers of one substance, but parts (μέρη) the distinction

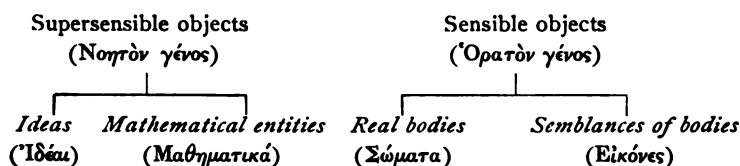
¹ *Phædo*, 102 ff.

² *Op. cit.*, 107.

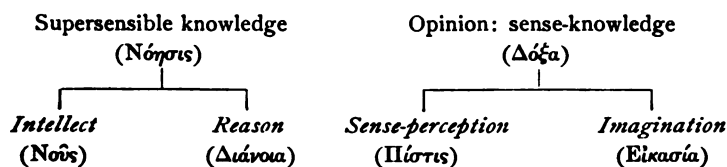
of which is proved by the fact that appetite strives against reason, and anger against reason and appetite.¹ Reason resides in the head; the irascible soul, the seat of courage, is in the heart; and appetite, the seat of desire, is in the abdomen.²

Of these three, the rational part alone is immortal. It alone is produced by God. By maintaining that the soul has parts Plato weakens his doctrine of immortality and exposes it to many objections.

Plato in his *theory of knowledge* bases his distinction of kinds of knowledge on the distinction of objects. Objects of knowledge³ are divided as follows:



To this corresponds the division of knowledge:



Knowledge begins with sense-perception. The senses, however, cannot attain a knowledge of truth. They contemplate the imperfect copies of the Ideas; as long as we look upon the objects of sense we are merely gazing at the shadows of things which, according to the celebrated *Allegory of the Cave*,⁴ are moving where we cannot see them, namely, in the world of Ideas from which the soul has fallen. Yet though the sense-perceived world cannot lead us to a knowledge of Ideas, it can

¹ *Rep.*, IV, 436 A.

³ Cf. *Rep.*, VI, 509; Ueberweg, *op. cit.*, p. 122.

² Cf. Cicero, *Tusculanae Disputationes*, I, 20.

⁴ *Rep.*, VII, 514.

✓ and does remind us of the Ideas which we saw in a previous existence. It is by the doctrine of recollection, therefore, that Plato bridges over the chasm between sense-knowledge and a knowledge of reality. Phenomena are not the causes, but merely the *occasions* of our intellectual knowledge; for in knowledge, as in existence, the universal, according to Plato, is the *prius* of the individual.

The doctrine of the *freedom of the will* assumes a novel phase in the philosophy of Plato. Plato unequivocally asserts that the will is free.¹ Not only is freedom of choice a quality of adult human activity, but it is free choice also that decides our parentage, hereditary tendencies, physical constitution, and early education, for all these are the result of actions freely performed during the previous existence of the soul. Notwithstanding this doctrine of freedom, Plato² holds the Socratic principle that no one is voluntarily bad.

Plato's *physiological doctrines* are of interest as serving to show the futility of attempting to explain the complicated phenomena of life with such inadequate experimental data as he had at his command. He was forced by his philosophical principles to neglect observation and to underestimate sense-knowledge. Aristotle, who attached greater value to empirical knowledge, was far more successful in his investigation of natural phenomena.

Ethics. Under this head are included Plato's ethical and political doctrines. If Plato's physics was styled the study of the Idea in the world of phenomena, this portion of his philosophy may be called *the study of the Idea in human action and human society*. Ethics, however, is vastly more important than physics in the Platonic system of thought; for physics is treated as if it were scarcely more than a science of the apparent, while such is the importance attached to ethics that Plato's philosophy as a whole has been described as primarily ethical.

¹ Cf. *Rep.*, X, 617; *Tim.*, 42.

² *Tim.*, 86 D.

And the description is true to a certain extent. All Platonic, as well as Socratic, speculation starts with an inquiry about the good and the beautiful, and proceeds, in the case of Plato, through the doctrine of concepts to the theory of Ideas. Nevertheless, while Socratic influence is more apparent in Plato's ethics than in any other portion of his philosophy, it is true that the system of ethics in its completed form is part of the Platonic structure, and is conditioned by the metaphysics, anthropology, and physics of Plato, as well as by the Socratic inquiries concerning virtue.

1. The *highest good*, subjectively considered, is happiness¹; objectively, it is the Idea of good, which, as has been seen, is identified with God.² Consequently, the aim of man's actions should be to free himself from the bonds of the flesh, from the trammels of the body in which the soul is confined, and by means of virtue and wisdom to become like to God, even in this life.³ Here, however, Plato shows a moderation which presents a striking contrast to the narrow-mindedness and intolerance of the Cynics as well as to the sensualism of the Hedonists; for though virtue and wisdom are the chief constituents of happiness, there is place also for right opinion, art, and for such pleasures as are genuine and free from passion.⁴

2. *Virtue* differs from the other constituents of happiness in this, that it alone is essential. It is defined⁵ as the order, harmony, and health of the soul, while vice is the contrary condition. Socrates had identified all virtue with wisdom; Plato merely assigns to wisdom the highest place among virtues, reducing all virtues to four supreme kinds, — *wisdom, fortitude, temperance, and justice*.⁶ He differs also from Socrates in his attempt to reduce the idea of virtue to its practical applications. Socrates, as has been pointed out, based all practical virtue on

¹ *Symp.*, 204 E.

² *Cf. Theat.*, 176 A.

³ *Phaedo*, 64 ff.

⁴ *Cf. Phileb.*, 28, 60, 62.

⁵ *Rep.*, IV, 443.

⁶ *Cf. ibid.*, IV, 441.

expediency; Plato, on the contrary, abandoned the utilitarian view, and by attaching to virtue an independent value inculcated greater purity of intention.

3. It is in the *State* that we find the most important applications of Plato's doctrine of virtue. Man should aim at being virtuous, and could, even in his savage condition, attain virtue. Without education, however, virtue would be a matter of mere chance, and without the State education would be impossible. While, therefore, the State is not the aim and end of human action, it is the indispensable condition of knowledge and virtue.¹

Accordingly, *the State should have for its object virtue*, or, as we should say, the establishment and maintenance of morality. Now, the only power that can remove from virtue what is contingent and casual and can place morality on a firm foundation is philosophy. Consequently, in the Platonic State, philosophy is the dominant power, and Plato teaches expressly that "unless philosophers become rulers or rulers become true and thorough students of philosophy, there will be no end to the troubles of states and of humanity."² The ideal State is *modeled on the individual soul*, for the State is the larger man. Now, in the soul there are three parts; in the State, therefore, there are three orders, — *rulers, warriors, and producers*.³

In the details of his scheme for the government of the ideal State, Plato is led by his aristocratic tendencies to advocate a system of *state absolutism*. He abolishes private interests and private possessions. He sacrifices the individual and the family to the community. He subordinates marriage and education to the interests of the State. He acknowledges, however, that his schemes are difficult of realization, and it is for this reason that in the *Laws* he sketches the scheme which, though inferior to the scheme outlined in *The Republic*, is nearer to the level of what the average State can attain.

¹ *Cf. Rep.*, VI, 490 ff.

² *Ibid.*, V, 473.

³ *Ibid.*, III, 415.

Religion and Æsthetics. This title does not, like physics and ethics, designate a portion of Plato's philosophy. It is merely a convenient heading under which are grouped the doctrines of Plato concerning the existence of God and the nature of the beautiful.

1. *Religion.* Plato, as we have seen, identifies true religion with philosophy. The highest object of philosophical speculation and the object of religious worship are one and the same, for philosophy is a matter of life and love as well as of theoretical thought. Atheism, therefore, is as irrational as it is impious. The *existence of God* is evident from the order and design which Plato recognizes as existing not only in animal organisms but also in the larger world of astronomy, in the cosmos whose soul is so much superior to the souls of animals and of men.¹ Besides this teleological argument Plato makes use of the argument from efficient cause.² He combats the principles of the early Physicists, according to whom all things, including reason itself, came originally from matter. This he considers to be an inversion of the true sequence; for reason precedes matter and is the cause of all material motion and of all the processes of matter.

The Divinity is the Absolute Good, the Idea of Goodness. Plato extols His power, His wisdom, and His all-including knowledge, and freely criticises the prevailing anthropomorphic notions of God. God is supremely perfect: He will never show Himself to man otherwise than He really is; for all lying is alien to His nature. He exercises over all things a Providence which orders and governs everything for the best;³ sometimes⁴ Plato speaks of God as a personal Being. Besides this sovereign Divinity, Plato admits the existence of *subordinate created gods*.⁵ It is they who mediate between God and matter, and fashion the body of man as well as the irrational parts of his

¹ Cf. *Phileb.*, 30.

² *Laws*, X, 893.

³ *Tim.*, 30.

⁴ As in *Tim.*, 37.

⁵ *Tim.*, 41.

soul. Chief among the created gods are the world-soul, the souls of the stars, and the demons of ether, air, and water.

With regard to *popular mythology*, Plato employs the names of the gods; he speaks of Zeus, Apollo, and the other divinities. But "the existence of these divinities, as held by the Greeks, he never believed, nor does he in the least conceal it."¹

2. *Æsthetics*. When we consider the importance of art in the thought and civilization of Greece, we are surprised at the scant attention which æsthetics received from Greek philosophers before Plato. And even Plato, though he concerned himself with the analysis of the beautiful into its metaphysical constituents, seems to have overlooked the necessity of a psychological study of the sentiment of the beautiful.

Although the *good* is the highest of the Ideas, the *beautiful* is of greatest interest in philosophy, because it shines more clearly through the veil of phenomena than does any of the other Ideas. For the essence of the beautiful is harmony, symmetry, and order, — qualities which strike the mind of the intelligent observer of the world of phenomena, even though he fail to penetrate to the depths of the phenomenon where the good lies hidden.

By a convenient phrase (*καλὸν καὶ ἀγαθόν*) the Greeks identified the beautiful with the good. The phrase, however, is capable of two interpretations. It was commonly understood to mean that *the beautiful is good*. Plato, following Socrates, interpreted it to mean that *the good is beautiful*. Corporeal beauty, he taught, is lowest in the scale of beautiful things; next come fair souls, fair sciences, and fair virtues; highest of all is the pure and absolute beauty to which none of the grossness of the phenomenon cleaves. Now, the good is harmonious and symmetrical Being. The good, therefore, is beautiful, and the phenomenon which partakes of the good partakes in like manner of the beautiful.²

¹ Zeller, *Plato*, p. 500.

² Cf. *Symp.*, 208; *Phileb.*, 64 E.

Art has for its object the realization of the beautiful. All human products are imitations; but while, for example, good actions are imitations of the Idea of good, and beautiful actions are imitations of the Idea of the beautiful, works of art are imitations of phenomena, — *imitations of imitations*. Consequently, art is not to be compared with dialectic, nor with industry, nor with the science of government; it is merely *a pastime* intended to afford pleasure and recreation, — strange doctrine, surely, for one who was himself a poet! Like other pastimes, it must be controlled, for art too often flatters the vulgar taste of the wicked and the base. Plato, accordingly, taught that all artistic productions, the works of sculptors and painters as well as those of poets and rhetoricians, should be submitted to competent judges, to whom should be delegated the authority of the State;¹ for rhetoric and all the other arts should be placed at the service of God, and should be so exercised as to assist the statesman in establishing the rule of morality.²

Historical Position. There is scarcely a portion of Plato's philosophy which does not betray the influence of his predecessors. The Socratic principle was his starting point. The Pythagorean school determined to a large extent his cosmological doctrines as well as his speculations about the future life. Empedocles, Anaxagoras, and the Earlier Ionians influenced his cosmogenetic theories and his doctrine of elements, while Heraclitus, Zeno the Eleatic, and Protagoras the Sophist contributed each in his own way to the Platonic theory of knowledge. Yet it goes without saying that Plato was no mere compiler. He modified even the Socratic teaching before making it part of his philosophical system, and whatever he derived from those who went before him he molded and wrought so as to fit it for its place in the vast philosophical edifice the foundation of which is the *theory of Ideas*. This

¹ Cf. *Rep.*, II, 377; *Gorgias*, 501 ff.

² *Phædrus*, 273.

distinctively Platonic theory is the basis on which rests the whole superstructure of physics, dialectic, ethics, theology, and æsthetics. It is also the unifying principle in Plato's system of thought. Whether the problem he discusses be the immortality of the soul, the nature of knowledge, the conditions of the life after death, the mission of the State, or the nature of the beautiful, his starting point is always the Idea. It is, therefore, no exaggeration to say that with the doctrine of Ideas the entire system of Platonic philosophy stands or falls. Consequently, our judgment of the value of the contents of Plato's philosophy must be postponed until we can enter with Aristotle into a critical examination of the value of the *theory of Ideas*. But whatever may be our judgment as to the value of his philosophy, no adverse criticism can detract from his preëminent claim to the first place among the masters of *philosophical style*. Even though we refuse to call him "profound," we cannot but subscribe to the verdict by which all ages have agreed to give to him the titles *divine* and *sublime*. Subsequent speculation, subsequent discovery, and subsequent increase in the facilities for acquiring knowledge have corrected much that Plato taught and added much to what he said, and yet not a single master has appeared who could dream of rivaling, not to say excelling, the literary perfection of his philosophical dialogues. This literary perfection goes deeper than words. It includes a peculiar charm of manner, by which Plato lifts us from the sordid world of material things to a world of exalted types and ennobling ideals. His aim as a philosopher is to demonstrate that true knowledge and true reality should be sought, not in the things of earth, but in those of that other world beyond the heavens, where there is no imperfection, change, or decay. It is this charm of manner that Joubert had in mind when he wrote: "Plato shows us nothing, but he brings brightness with him; he puts light into our eyes, and fills us with a clearness by which all objects afterwards become illuminated.

He teaches us nothing ; but he prepares us, fashions us, and makes us ready to know all. The habit of reading him augments in us the capacity for discerning and entertaining whatever fine truths may afterwards present themselves. Like mountain air, it sharpens our organs and gives us an appetite for wholesome food."

CHAPTER X

THE PLATONIC SCHOOLS

The *Laws*, which, according to the most probable opinion, was written by Plato, though it was not made public until after his death, bears evidence of the influence which, in the later years of his life, the philosophy of the Pythagoreans exercised on his mind, inclining him to attach more and more importance to the *mystic element* in philosophy and to the *number theory*. It was this phase of Platonic thought that was taken up and developed by the Platonic Academies, while in the hands of Aristotle the teachings of the earlier dialogues were carried to a higher development. During the lifetime of Plato there was little, if any, dissension among the members of the school which assembled in the grove of Academus ; after Plato's death, however, Aristotle set up a school of his own, in opposition to the members of the Academy, who claimed to possess in their scholarch the authorized head of the Platonic school.

The first scholarch was Speusippus, the nephew of Plato, who, according to Diogenes Laertius,¹ received his appointment from Plato himself. He in turn was succeeded by Xenocrates,² and in this manner the succession of scholarchs continued down to the sixth century of the Christian era.³

It is customary to distinguish in the history of the Platonic school three periods, known as the *Old*, the *Middle*, and the

¹ IV, 1.

² *Ibid.*, IV, 14.

³ Cf. Ueberweg, *op. cit.*, I, 485 ff.

New Academy. To the *Old Academy* belonged *Speusippus*, *Xenocrates*, *Heraclides* of Pontus, *Philip* of Opus, *Crates*, and *Crantor*; *Arcesilaus* and *Carneades* are the principal representatives of the *Middle Academy*; while *Philo* of Larissa and *Antiochus* of Ascalon are the best-known members of the *New Academy*.

Sources. Our sources of information concerning the history of the doctrines of the three Academies are for the most part secondary; they are scanty and cannot be relied upon in matters of detail. As far, however, as a general characterization of each school is concerned, our materials are sufficiently ample and trustworthy.

Old Academy. The Old Academy flourished from the death of Plato (347 B.C.) until the appearance of Arcesilaus as scholarch (about 250 B.C.). It is distinguished by its interpretation of the Platonic theory of Ideas in accordance with the *number theory of the Pythagoreans*.

Speusippus seems to have *substituted numbers for Ideas*, assigning to them all the attributes, including separate existence, which Plato in his earlier dialogues had attributed to the Ideas.¹ Although, according to Theophrastus, Speusippus devoted but little attention to the study of the natural sciences, on one important point of physical doctrine he differed from Plato, maintaining, if we are to believe our Neo-Pythagorean authorities, that the *elements are five*, not four, and deriving these five, after the manner of Philolaus, from the five regular figures.² If, as is probable, Aristotle, in *Analytica Posteriora*, II, 13, 97 a, 6, is speaking of Speusippus, the latter maintained that in order to know anything we must know everything.

Xenocrates continued to combine, as Speusippus had done, the number theory of the Pythagoreans with Plato's doctrine of Ideas. He went farther, however, than Speusippus in his *application of number to theological notions*, developing a

¹ Arist., *Met.*, VII, 2, 1028 b, 19.

² Cf. Zeller, *Plato*, p. 578, n.

system of demonology which suggests in its elaborateness the doctrines of the Neo-Platonists.

Heraclides of Pontus is remarkable for having taught the diurnal *revolution of the earth* on its axis, and the immobility of the fixed stars. These views were first proposed by Hicetas of Sicily and by Ecphantus, who was also a Sicilian. Our authorities are Theophrastus¹ and Plutarch.²

Philip of Opus is generally believed to be the author of *Epinomis* and the editor of the *Laws*, of which the *Epinomis* is a continuation.

Crates and **Crantor** devoted themselves mainly to the study of ethical problems.

Middle Academy. The Middle Academy was "characterized by an ever-increasing *tendency to scepticism*." Chronologically, it belongs to the third period of Greek philosophy, and in its spirit and contents it is more in keeping with the post-Aristotelian age than with the time of Plato and Aristotle.

Arcesilaus, who was born about 315 B.C., is regarded as the founder of the Middle Academy. He combated the dogmatism of the Stoics, maintaining that as, according to the Stoics, the criterion of truth is perception, and as a false perception may be as irresistible as a true one, all scientific knowledge is impossible. It is, therefore, he concluded, the duty of a wise man to refrain from giving his assent to any proposition, — an attitude of mind which the Academicians called *forbearance* (*ἀποχή*). Still, Arcesilaus would grant that a degree of probability sufficient for intelligent action is possible.³

Carneades lived from about 210 to 129 B.C. Consequently, he was not the immediate successor of Arcesilaus, whose principles he developed into a more pronounced system of Scepticism. He held that there is no criterion of truth; that what we take to

¹ *Apud* Cicero, *Acad.*, II, 39.

² *Placita*, III, 13.

³ *Cf.* Cicero, *De Orat.*, III, 13.

be true is only the appearance of truth, — *φαινόμενον ἀληθές*, which Cicero renders *probabile visum*.¹

New Academy. After the death of Carneades, the Academy abandoned Scepticism and returned to the dogmatism of its founder.

Philo of Larissa and **Antiochus** of Ascalon introduced into the Academy elements of Stoicism and Neo-Platonism which belong to the third period of Greek philosophy.

Historical Position. The Academics, although they were the official representatives of Platonic philosophy, failed to grasp the true meaning of the theory of Ideas. By introducing Pythagorean and other elements they turned the tradition of the Platonic school out of the line of its natural development, and ended in adopting a scepticism or a dogmatic eclecticism, either of which is far from what should have been the logical outcome of Plato's teaching. They are to Plato what the imperfectly Socratic schools are to Socrates. The continuity, therefore, of Platonic thought is not to be looked for in these schools but rather in the school founded by Aristotle.

CHAPTER XI

ARISTOTLE

The Socratic doctrine of concepts introduced into philosophy the notion of the universal. No sooner, however, had Socrates formulated the doctrine of universal concepts than the Cynics arose denying that anything exists except the individual. Thus it at once became necessary to define the true relation between the universal and the individual. This was the aim of Plato's theory of Ideas, in which the relation was explained by *deriving the individual* (in reality and in knowledge) *from the universal*.

¹ Cf. Stöckl, *Lehrbuch*, I. 173; English trans., Vol. I. p. 95; Zeller, *Stoics*, etc., p. 538.

Aristotle, judging that Plato's explanation was a failure, opened up the problem once more, and endeavored to solve it by *deriving the universal* (in reality and in knowledge) *from the individual*. The continuity of philosophic thought is, therefore, to be traced from Socrates, through Plato, to Aristotle, as if the imperfect Socratic and Platonic schools had not existed.

Life.¹ Aristotle was born at Stagira, a seaport town of the colony of Chalcidice in Macedonia, in the year 384 B.C. His father, Nicomachus, was physician to King Amyntas of Macedon, and if, as is probable, the profession of medicine was long hereditary in the family, we may suppose that this circumstance was not without its influence in determining Aristotle's predilection for natural science. When he was eighteen years old, Aristotle went to Athens, where for twenty years he followed the lectures of Plato. Many stories are told concerning the strained relations between the aged teacher and his illustrious scholar, — stories which, however, are without any foundation. There may indeed have been differences of opinion between master and pupil, but there was evidently no open breach of friendship, for in later years Aristotle continued to count himself among the Platonic disciples,² associated with Xenocrates on terms of intimate friendship, and showed in every way that his respect for his teacher was not lessened by the divergence of their philosophical opinions. Many of the tales told to Aristotle's discredit are traced to Epicurus and the Epicureans, — calumniators by profession (grubbers of gossip, as Zeller calls them), — and it is to be regretted that writers like St. Gregory Nazianzen and Justin Martyr were misled by statements which were manifestly made with a hostile purpose. We are safe, therefore, in supposing that Aristotle was a diligent and attentive pupil, and that he did not give expression to his criticism of Plato's theories until after he had listened to everything that Plato had to say in explanation and defense of his views.

After Plato's death Aristotle repaired, in company with Xenocrates, to the court of Hermias, lord of Atarneus, whose sister or niece, Pythias, he married. In 343 he was summoned by Philip of Macedon to become the tutor of Alexander, who was then in his thirteenth year. The influence which he exercised on the mind of the future conqueror is described in Plutarch's *Alexander*. When Alexander departed on his Asiatic campaign

¹ For sources, cf. Zeller, *Aristotle and the Earlier Peripatetics*, Vol. I, p. 2, n.; Wallace, *Outlines of the Philosophy of Aristotle*, p. 17.

² As in *Met.*, I, 9, 992 a.

Aristotle returned to Athens. This was about the year 335. It is possible that, as Gellius¹ says, Aristotle had, during his former residence at Athens given lessons in rhetoric; it is certain that now for the first time he opened a school of philosophy. He taught in a gymnasium called the *Lyceum*, discoursing with his favorite pupils while strolling up and down the shaded walks around the gymnasium of Apollo, — whence the name *Peripatetics* (from *περιπατέω*).²

Through the generosity of his royal pupil, Aristotle was enabled to purchase a large collection of books, and to pursue his investigations of nature under the most favorable circumstances. His writings prove how fully he availed himself of these advantages: he became thoroughly acquainted with the speculations of his predecessors and neglected no opportunity of conducting, either personally or through the observations of others, a systematic study of natural phenomena. Towards the end of Alexander's life the relations between the philosopher and the great commander became somewhat strained. Still, so completely was Aristotle identified in the minds of the Athenians with the Macedonian party that after Alexander's death he was obliged to flee from Athens. The charge which was made the pretense of his expulsion from the city was the stereotyped one of impiety, to which charge Aristotle disdained to answer, saying (as the tradition is) that he would not give the Athenians an opportunity of offending a second time against philosophy. Accordingly, he left the city (in 323), repairing to Chalcis in Eubœa. There he died in the year 322, a few months before the death of Demosthenes. There is absolutely no foundation for the fables narrated by so many ancient writers and copied by some of the early Fathers, that he died by poison or that he committed suicide by throwing himself into the Eubœan Sea "because he could not explain the tides."

Aristotle's Character. Eusebius, in his *Præparatio Evangelica*, XV, 2, enumerates and refutes the accusations which were brought against Aristotle's personal character, quoting from Aristocles, a Peripatetic of the first century B.C. These accusations are practically the same as those which gained currency among the enemies and detractors of Plato, and are equally devoid of foundation. From Aristotle's writings, from fragments of his letters, from his will, as well as from the reliable accounts of his life, we are enabled to form a tolerably complete picture of his personal character. Noble, high-minded, thoroughly earnest, devoted to truth, courteous to his opponents, faithful to his friends, kind towards his slaves, he did not fall far short of the ideal moral life which he sketched in his ethical

¹ *Noct. Att.*, XX.

² On the derivation of this word, cf. Zeller, *op. cit.*, p. 27, n.

treatises. Compared with Plato, he exhibited greater universality of taste; he was not an Athenian; in a certain sense, he was not a Greek at all. He exhibited in his character some of that cosmopolitanism which afterwards became a trait of the ideal philosopher.

Aristotle's Writings.¹ It is quite beyond dispute that some of the works which Aristotle compiled or composed have been lost. Thus, for example, the *ἀνατομαί* (containing anatomical charts), the *περὶ φυτῶν* (the existing treatise *De Plantis* is by Theophrastus), the *πολιτεῖαι* (a collection of constitutions of states; the portion which treats of the Constitution of Athens has been discovered in recent years), and the *Dialogues* are among the lost works. It is equally certain that many portions of the collected works of Aristotle as we now possess them are of doubtful authenticity, while it is possible that a still larger number of books or portions of books are little more than lecture notes amplified by the pupils who edited them. It is well, for example, for the student of the *Metaphysics* to know that, of the fourteen books which compose it, the first, third, fourth, sixth, seventh, eighth, and ninth constitute the work as begun but not finished by Aristotle. Of the remaining books, the second and one half of the eleventh are pronounced spurious, while the rest are independent treatises which were not intended to form part of the work on first philosophy. Without entering into the more minute questions of authenticity, we may accept the following arrangement of Aristotle's works, with their Latin titles.²

LOGICAL TREATISES

Constituting the *Organon*: (1) *Categoriae*, (2) *De Interpretatione*, (3) *Analytica Priora*, (4) *Analytica Posteriora*, (5) *Topica*, (6) *De Sophisticis Elenchis*. These were first included under the title of *Organon* in Byzantine times.

METAPHYSICAL TREATISE

The work entitled *μετὰ τὰ φυσικά* (or at least a portion of it) was styled by Aristotle *πρώτη φιλοσοφία*. Its present title is probably due to the place which it occupied (after the physical treatises) in the collection edited by Andronicus of Rhodes (about 70 B.C.).

¹ Cf. Wallace, *op. cit.*, pp. 18 ff.

² Recent editions of Aristotle's *Works*: the Berlin edition (5 vols., 1831-1870), which is made the basis of citations; the Didot edition (5 vols., Paris, 1848-1870). For list of translations and secondary sources, cf. Weber, *op. cit.*, p. 104, n., and Ueberweg, *op. cit.*, I, pp. 140 and 152.

PHYSICAL TREATISES

(1) *Physica Auscultatio*, or *Physica*, (2) *De Cælo*, (3) *De Generatione et Corruptione*, (4) *Meteorologica*, (5) *Historiæ Animalium*, (6) *De Generatione Animalium*, (7) *De Partibus Animalium*.

PSYCHOLOGICAL TREATISES

(1) *De Anima*, (2) *De Sensu et Sensibili*, (3) *De Memoria et Reminiscencia*, (4) *De Vita et Morte*, (5) *De Longitudine et Brevitate Vitæ*, and other minor works.

ETHICAL TREATISES

(1) *Ethica Nicomachea*, (2) *Politica*. The *Eudemian Ethics* is the work of Eudemus, although it is probable that it was intended as a recension of an Aristotelian treatise.

RHETORICAL AND POETICAL TREATISES

(1) *De Poetica*, (2) *De Rhetorica*. These are spurious in parts.

Gellius¹ speaks of a twofold class of Aristotelian writings, the *exoteric*, which were intended for the general public,² and the *acroatic*, which were intended for those only who were versed in the phraseology and modes of thought of the school. All the extant works belong to the latter class. The story of the fate of Aristotle's works as narrated by Strabo³ and repeated with the addition of a few details by Plutarch,⁴ is regarded as reliable. It tells how the library of Aristotle fell into the hands of Theophrastus, by whom it was bequeathed to Neleus of Scepsis. After the death of Neleus the manuscripts were hidden in a cellar, where they remained for almost two centuries. When Athens was captured by the Romans in 84 B.C., the library was carried to Rome by Sulla. At Rome a grammarian named Tyrannion secured several copies, thus enabling Andronicus of Rhodes to collect the treatises and publish them. It must not, however, be inferred that the manuscripts hidden in the cellar for two hundred years were the only existing copy of Aristotle's works, or that during all those years the Peripatetic philosophers were without a copy of the works of Aristotle.

¹ *Noct. Att.*, XX, 5.

² It is these that Cicero had in mind when he alluded to "the golden stream of Aristotle's eloquence" (*Top.*, I, 3).

³ XIII, I, 54.

⁴ *Sulla*, 26.

The subsequent history of the *Corpus Aristotelicum* and the story of the Syriac, Arabian, and Latin translations belong to the history of mediæval philosophy.

ARISTOTLE'S PHILOSOPHY

General Character and Division. Aristotle's concept of philosophy agrees, in the main, with that of Plato. Philosophy is *the science of the universal essence of that which is actual*.¹ Aristotle is, however, more inclined than Plato was to attach a theoretical value to philosophy. The difference between the two philosophers is still greater in their respective notions of philosophic method. Aristotle does not begin with the universal and reason down to the particular; on the contrary, he starts with the particular data of experience and reasons up to the universal essence. His method is inductive as well as deductive. Consequently, he is more consistent than Plato in including the natural sciences in philosophy and considering them part of the body of philosophic doctrine. In fact, Aristotle makes philosophy to be coextensive with scientific knowledge. "All science (*διάνοια*) is either *practical, poetical, or theoretical*."² By practical science he means politics and ethics; under the head *poietic* (*ποιητική*) he includes not only the philosophy of poetry but also the knowledge of the other imitative arts, while by theoretical philosophy he understands *Physics, Mathematics, and Metaphysics*. Metaphysics is philosophy in the stricter sense of the word: it is *the knowledge of immaterial Being, or of Being in the highest degree of abstraction* (*περὶ χωριστὰ καὶ ἀκίνητα*); it is the pinnacle of all knowledge, the *theological science*. In this classification logic has no place, being apparently regarded as a science preparatory to philosophy.

Our study of Aristotle's philosophy will, therefore, include: (A) *logic*; (B) *theoretical philosophy*, including (a) *metaphysics*,

¹ *Met.*, VI, 1, 1028.

² *Met.*, VI, 1, 1025 b, 25.

(b) *physics*, (c) *mathematics*; (C) *practical philosophy*; (D) *poietical philosophy*.

A. **Logic, including Theory of Knowledge.** Aristotle does not employ the word *logic* in the modern meaning of the term. The science which we call logic, and of which he is rightly considered the founder, was known to him as *analytic*. The *Organon*, as the body of logical doctrine was styled by the later Peripatetics, consists of six parts, or treatises:

1. The *Categoriæ*. In the first of his logical treatises Aristotle gives his classification, or enumeration, of the highest classes (categories) into which all concepts, and consequently all real things, are divided. They are *substance, quantity, quality, relation, action, passion, place, time, situation, and habitus*. He intimates that these are intended as classes of things expressed by isolated words, τὰ ἄνευ συμπλοκῆς λεγόμενα, that is to say, by words which do not form part of a proposition. They are to be distinguished, therefore, from the *predicables*, or classes of the possible relations in which the predicate of a proposition may stand to the subject. The predicables are *definition* (ὅρος), *genus, difference, property, and accident*.

There can be no reasonable doubt as to the originality of the Aristotelian arrangement of categories. It is true that there is a remote analogy between the categories and the distinctions of the grammarian; but the analogy can be explained without supposing that Aristotle expressly intended to conform his categories to the grammatical divisions of words. It is also true that Aristotle does not always enumerate the categories in the same manner.¹

2. The *De Interpretatione*. In the second of the logical treatises, Aristotle takes up the study of the *proposition* and the *judgment*. He distinguishes the different kinds of propositions, and treats of their opposition and conversion. This portion of his work forms the core of modern logical teaching.

¹ Cf. *Met.*, VI, 2, 1026 a, 36; V, 8, 1017 a, 24; *Phys.*, V, 1, 223 b, 5.

3. The *Analytica Priora* contains the treatise on reasoning, deductive and inductive. In his doctrine of the *sylogism* Aristotle admits only three figures. The syllogism, he teaches, is based on the *Law of Contradiction* and the *Law of Excluded Middle*. He mentions three rules of the syllogism. *Induction* (ἐπαγωγή) he defines as reasoning from the particular to the general, and though the syllogism, which proceeds from the general to the particular, is more cogent, *in itself*, induction is, *for us*, easier to understand. The only kind of induction admitted by Aristotle is complete induction.

4. In the *Analytica Posteriora* Aristotle takes up the study of *demonstration* (ἀποδείξεις). True demonstration, as indeed all true scientific knowledge, deals with the universal and necessary causes of things. Consequently, all true demonstration consists in showing causes, and the middle term in a demonstration must, therefore, express a cause. Not all truths, however, are capable of demonstration. The *first principles* of a science cannot be demonstrated in that science, and principles which are first, absolutely, are indemonstrable: they belong not to reason, but to intellect (Νοῦς). To the class of indemonstrable truths belong also truths of immediate experience.¹

5. The *Topica* has for subject-matter the *dialectical* or *problematic syllogism*, which differs from demonstration in this, that its conclusions are not certain but merely probable; they belong to opinion rather than to scientific knowledge. The *Topica* also treats of the *predicables*.

6. The treatise *De Sophisticis Elenchis* contains Aristotle's study of *fallacies*, or *sophisms*. It contains also an attack on the Sophists and their methods.

Before we proceed to explain Aristotle's metaphysical doctrines it is necessary to take up the principles of his theory of knowledge as we find them in the *Analytica Posteriora* and elsewhere in his logical and metaphysical treatises.

¹ Cf. Stöckl, *op. cit.*, I, 115; English trans., p. 105.

Theory of Knowledge. Nowhere does the contrast between the philosophy of Plato and that of Aristotle appear so clearly as in their theories of knowledge.

1. Plato makes experience to be merely the *occasion* of scientific knowledge. Aristotle regards experience as the *true source and true cause* of all our knowledge; intellectual as well as sensible.¹

2. Plato *begins with the universal* (Idea) and attempts to descend to the particular (phenomenon); Aristotle, while he recognizes that there is no science of the individual as such (ἡ δ' ἐπιστήμη τῶν καθόλου),² maintains, nevertheless, that *our knowledge of the individual precedes our knowledge of the universal*: ἐκ τῶν καθ' ἕκαστα γὰρ τὸ καθόλου.³

3. Plato *hypostatized the universal*, attributing to it a separate existence. This, according to Aristotle, is to reduce the universal to a useless form; for, if the universal exists apart from the individual, there can be no transition from a knowledge of the one to a knowledge of the other. *The universal*, Aristotle teaches, *is not apart from individual things*.⁴

4. Finally, according to Plato, the universal, as it exists apart from phenomena, is a full-blown universal, endowed with the formal character of universality; according to Aristotle, the formal aspect of universality is conferred by the mind, and, therefore, *the universal, as such*, does not exist in individual things, but *in the mind alone*. This is the only intelligible interpretation of such passages as *Metaphysics*, III, 4, 999, and *De Anima*, II, 5, 417, in which Aristotle maintains that the individual alone exists and that the universal is somehow (πῶς) in the mind.⁵

¹ Cf. *Anal. Post.*, II, 19, 99 b.

² *Met.*, XIII, 10, 1086 b, 33.

³ *Eth. Nic.*, VI, 11, 1143 b, 5.

⁴ In *Anal. Post.*, I, 11 *init.*, Aristotle substitutes the phrase ἐν κατὰ πολλῶν for the Platonic ἐν παρὰ τὰ πολλὰ.

⁵ Cf. *Met.*, I, 9, 991 a, 12, 991 b, 1; XIII, 9, 1085 a, 23, etc.; Prantl, *Gesch. der Logik*, I, 210 ff.

Aristotle's theory of knowledge, as is evident from the four principles just explained, recognizes two fundamental attributes of intellectual knowledge: its *essential dependence* on sense-knowledge and its equally *essential superiority* to sense-knowledge. Aristotle is as careful to avoid sensism on the one hand as he is to escape idealism on the other; for, though he admits that all knowledge begins with experience, he contends that intellectual thought (*νόσις*) is concerned with the universal, or *intelligible* (*νοητόν*), while sense-knowledge has for its object the individual, the *sense-perceived* (*αἰσθητόν*). The distinction of objects is made the basis and ground of a distinction of faculties and of kinds of knowledge.¹

If, then, there is a distinction between sense-knowledge and thought, and if all knowledge begins with sense-knowledge, *how do we rise from the region of sense to that of intellect?* Aristotle answers by distinguishing first and second substance. The *first substance* (*οὐσία πρώτη*) is the individual, which can neither exist in another nor be predicated of another. *Second substance* is the universal, which, as such, does not exist in another, but may be predicated of another. In the individual substance we distinguish, on closer examination, two elements, the *ὑποκείμενον*, or undetermined, determinable substratum, the *matter* (*ὕλη*), and the determining principle, or *form* (*εἶδος*), by which the substance is made to be what it is.² The essential nature, therefore, the unalterable essence corresponding to the concept — the object, consequently, of intellectual knowledge — is the form. Matter, it is true, is part of the essential nature,³ but it is, as it were, the constant factor, always the same, and of itself undifferentiated; it enters into a definition as *materia communis*, and when we designate the form of an object, implying the presence of matter in its general concept, we have answered the question, 'What is that object?' The form,

¹ Cf. *De An.*, II, 4, 415 b.

² Cf. *Met.*, VIII, 6, 1045 a, 12; X, 1, 1052 a, 22.

³ Cf. *infra*, p. 138.

then, considered apart from the matter, is the essence of the object as far as intellectual knowledge is concerned; for intellectual knowledge has for its object the universal, and since matter is the principle of individuation, and form the principle of specification, the conclusion of the inquiry as to the object of intellectual knowledge is that matter and the individual qualities arising from matter belong to sense-knowledge, while the form alone, which is the universal, belongs to intellectual knowledge.¹ Returning now to the question, How do we rise from the region of sense to the region of intellect? the object of sense-knowledge, we repeat, is the whole, the concrete individual substance. Thought, penetrating through the sense qualities, reaches the form, or quiddity, lying at the core of the substance, and this form, considered apart from the material conditions in which it is immersed, is the proper object of intellectual knowledge. Thus, the acquisition of scientific knowledge is a true *development* of sense-knowledge into intellectual knowledge, if by development is understood the process by which, under the agency of the intellect, the potentially intelligible elements of sense-knowledge are brought out into actual intelligibility. Aristotle himself describes the process as one of *induction* (ἐπαγωγή) or *abstraction* (ἀφαίρεσις).²

B. Theoretical Philosophy. a. Metaphysics. In the foregoing account of Aristotle's theory of knowledge it has been found necessary to mention form, matter, and substance, notions which properly belong to this division of his philosophy.

1. *Definition of metaphysics.* Metaphysics, or first philosophy, is *the science of Being as Being*.³ Other sciences have to do with the proximate causes and principles of Being, and, therefore, with Being in its lower determinations. Metaphysics considers Being *as such*, in its highest or most general determinations, and consequently it is concerned with the highest,

¹ *Phys.*, I, 5, 189 a, 7.

² *Cf. Anal. Post.*, I, 13, 81.

³ *Met.*, IV, 1, 1003 a, 21.

or ultimate, causes. Accordingly, on metaphysics devolves the task of considering the axioms of all sciences in so far as these axioms are laws of all existence. For this reason it is that in the *Metaphysics* Aristotle takes up the explanation and defense of the *Law of Contradiction*.

2. *Negative teaching.* Before proceeding to answer the problem of metaphysics, What are the principles of Being? Aristotle passes in review the answers given by his predecessors. He not only recounts the doctrines and opinions of the pre-Socratic philosophers, — thereby adding to his many titles that of *Founder of the History of Philosophy*, — but he also points out what seem to him to be the shortcomings and imperfections of each school or system. His *criticism of Plato's theory of Ideas* is deserving of careful study, because it is an unprejudiced examination of a great system of thought by one who was unusually well equipped for the task, and also because it is the most natural and intelligible introduction to the positive portion of Aristotle's *Metaphysics* in which he expounds his own views.

Both Plato and Aristotle maintain that scientific knowledge is concerned with the universal (compare Socratic doctrine of concepts). They agree in teaching that the world of sense is subject to change and that we must go beyond it to find the world of ideas. Here, however, they part company. Plato places the world of Ideas, the region of scientific knowledge, outside phenomena; Aristotle places it in the sensible objects themselves. It is, therefore, against the doctrine of a *separate* world of Ideas that all Aristotle's criticism of Plato's theory is directed.

(a) In the first place, Aristotle contends¹ that the Platonic theory of Ideas is *wholly barren*. The Ideas were intended to explain how things came to be and how they came to be known; but they cannot be principles of Being, since they are not *existent in* things, and they cannot be principles of knowledge, since

¹ *Met.*, I, 9, 991 b.

they exist apart from and have no intelligible relation to the things to be known. To suppose that we know things better by adding to the world of our experience the world of Ideas, is as absurd as to imagine that we can count better by multiplying the numbers to be counted. In a word, the Ideas are a meaningless duplication of sensible objects.

(b) In the next place, Aristotle¹ recognizes in the theory of Ideas an attempt at solving the *problem of motion and change*. Indeed, since the Ideas are the only reality, they must contain the principle of change, for change is a reality; but Plato, by separating the Ideas from the world of phenomena, and by insisting on the static rather than on the dynamic phase of the Ideas, precluded all possibility of accounting for change by means of the Ideas.²

(c) Moreover, Aristotle finds several *contradictions in the Platonic theory*. He is not satisfied with the Platonic doctrine of *community* between the Idea and the phenomenon; for, if the participation of the Idea by the phenomenon is anything more than a mere figure of speech, if there is really part of the Idea in the phenomenon, there must be a prototype on which this participation is modeled. If such a prototype exists, there is, for example, a *τρίτος ἄνθρωπος* in addition to the absolute Idea of man and the man who exists in the world of phenomena. The significant fact is that Plato at one time describes the participation as *μέθεξις*, at another as *μίμησις*, and ends by leaving it unexplained.³

(d) Finally, the reason why Plato introduced the doctrine of Ideas was because scientific knowledge must have for its object something other than the phenomenon. Now, scientific knowledge has an object, if Ideas *exist*. The *validity of scientific knowledge* does not require that the Idea should exist *apart from the phenomenon itself*.⁴

¹ Cf. *Met.*, I, 9, 991 b.

² Cf. *Met.*, XIII, 5, 1079 a, 13.

³ Cf. Wallace, *op. cit.*, p. 64.

⁴ *Op. cit.*, I, 9, 999 a, 12; VII, 1031 a, 20 ff.

3. *Positive teaching.* Metaphysics, as has been said, is the inquiry into the highest principles of Being. A principle (*ἀρχή*) is that by which a thing is or is known.¹ The first problem of metaphysics is, therefore, to determine the relation between *actuality* and *potentiality*, the first principles of Being in the order of determination, or differentiation. Actuality (*ἐντελέχεια, ἐνέργεια*) is perfection, potentiality (*δύναμις*) is the capability of perfection. The former is the determining principle of being, the latter is of itself indeterminate. Actuality and potentiality are above all categories; they are found in all beings with the exception of One, whose being is all actuality. In created being, then, as we should say, there is a mixture of potency and actuality. This mixture is, so to speak, the highest metaphysical formula, under which are included the compositions of matter and form, substance and accident, the soul and its faculties, active and passive intellect, etc. The dualism of actual and potential pervades the metaphysics, physics, psychology, and even the logic of Aristotle.

Still, potency and actuality are principles of Being in its metaphysical determinations. In the physical order, there enter into the constitution of concrete being four other principles called *causes* (*αἰτίαι*). A cause is defined as *that which in any way influences the production of something*: it is, therefore, a principle in the order of physical determination. The classes of causes are four, — *matter* (*ὕλη*), *form* (*εἶδος* or *μορφή*), *efficient cause* (*τὸ κινητικόν*), and *final cause* (*τὸ οὐ ἕνεκα*).² Of these, matter and form are intrinsic constituents of being, while efficient and final causes are extrinsic principles. Nevertheless, these latter are true causes inasmuch as the effect depends on them.

Matter, or *material cause*, is that *out of which* being is made; bronze, for example, is the material cause of the statue. Matter is the substratum (*ὑποκείμενον*), indeterminate but capable of determination. It is the receptacle (*δεκτικόν*) of Becoming and

¹ *Met.*, V, 1, 1013 a, 18.

² *Cf. Phys.*, II, 3, 194 b, 16.

decay.¹ It can neither exist nor be known without form. In a word, it is potency. Matter in the condition of absolute potentiality is called *first matter* (ὕλη πρώτη), that is, matter without any form. *Second matter* is matter in the condition of relative potentiality. Second matter possesses a form, but because of its capability of further determination it is in potency to receive other forms.

Form, or *formal cause*, is that *into which* a thing is made. It is the principle of determination overcoming the indeterminateness of matter. Without it matter cannot exist: it is actuality. The Aristotelian notion of form, like the Platonic notion of Idea, was intended as a protest against the scepticism of the Sophists and the panmetabolism of the Heracliteans. Form is the object of intellectual knowledge, the unalterable essence of things, which remains unchanged amid the fluctuations of accidental qualities. Like the Idea, the form is the plentitude of actual being, for while matter is a reality, it is real merely as a potency. There is, however, a radical difference between the form and the Idea; the form exists in individual beings, the Idea exists apart from them: Aristotle merely *distinguished* matter and form; Plato not only *distinguished* but also *separated* the Idea from the phenomenon.

The union of matter and form constitutes the individual, or concrete, substance (τὸ σύνολον, οὐσία πρώτη). From matter arise the imperfections, limitations, and individuating qualities; from form come the essential, unalterable attributes, the specific nature of the substance. Matter, then, being presupposed as the common substratum of material existence, a substance is constituted in its essential nature by the form. Hence it is that Aristotle identifies the form with the essence, the *quiddity* (τὸ τί ἦν εἶναι),² the universal nature of a substance. Form

¹ *De Gen. et Corr.*, I, 4, 320 a, 2.

² For the origin and meaning of this expression, cf. Ritter and Preller, *op. cit.*, p. 314, note f; also Ueberweg, *op. cit.*, Vol. I, p. 161.

is a *second substance* (οὐσία δεύτερα) which, while it cannot inhere in another as in a subject, may, on account of its universality, be predicated of many. It would, however, be a serious mistake to represent Aristotle as reducing all reality to form, and ending as Plato had begun, with the doctrine of monism. For matter, in its generic concept, enters into the definition of the specific nature, and while it is not an actual, it is a real principle of being.¹

Aristotle further develops his theory of the relation between matter and form by teaching that matter is destined to receive form. It tends towards its form with something akin to desire: for the absence of form is not mere negation; it is *privation* (στέρησις). Aristotle, however, explains² that matter is not pure privation. It is a positive something which, of its nature, is disposed to become determined by means of form.

Efficient cause is the third principle of being. It is defined as that *by which* (that is, by the agency of which) the effect is produced. Ultimately, it is form considered as operative, for no agent can act except by virtue of the form, which is the principle of its action as well as of its being.³ Hence the Scholastic adage, *Agere sequitur esse*. Moreover, all action is motion (κίνησις), and motion is defined as the passing from potency to actuality: ἡ τοῦ δυνάμει ὄντος ἐντελέχεια ἢ τοιοῦτον.⁴ This identification of action with motion, and the definition of motion in terms of the actual and potential, lead at once to a conclusion which is, at first sight, startling in its universality, — that all natural processes are processes of *development*, and that action merely brings out latent possibilities by bringing into actuality those perfections which were already contained as potencies in the matter. This generalization, it may be remarked, is in perfect harmony with modern physical principles, as, for

¹ Cf. *Met.*, VII, 7, 1032 b; VIII, 6, 1045 a, 33; X, 1, 1052 a, 22.

² *Phys.*, I, 7, 191 a, 10.

³ Cf. *op. cit.*, II, 7, 198 a, 24.

⁴ *Op. cit.*, III, 1, 201 a, 10.

example, with the Law of the Conservation of Energy. Aristotle, it is true, does not enter into the question of quantitative relations between the potential and the actual. But the higher the human mind rises in its inquiries, the less attention it pays to questions of quantitative equivalence, and the more importance it attaches to the general notion of internal development.

Final cause, the fourth principle of being, that *on account of which* the effect is produced, is, in a certain sense, the most important of all the causes.¹ It not only determines whether the agent shall act, but it also determines the mode and manner of the action and the measure of the effect produced, so that if we could know the motive or end of an action, we should be in possession of a most fruitful source of knowledge concerning the result of that action. The final cause, like the efficient, is, in ultimate analysis, identical with form; it is the form of the effect, *presented in intention and considered as a motive*, inasmuch as by its desirability it impels the agent to act.

By the reduction of efficient and final causes to formal cause the ultimate principles of (finite) being are reduced to two, — matter and form. These are the two intrinsic, essential constituents of the individual, concrete object, matter being the source of indeterminateness, potency, and imperfection, while form is the source of specific determination, actuality, and perfection.

The Aristotelian doctrine of causes is a *synthesis of all preceding systems of philosophy*. The Earlier Ionians spoke generically of cause; the Later Ionians distinguished material and efficient causes; Socrates, developing the doctrine of Anaxagoras, introduced the notion of final cause; Plato was the first to speak of formal causes — unless the Pythagorean notion of number may be regarded as an attempt to find a formal principle of being. Thus did the generic notion of cause gradually undergo differentiation into the four kinds of cause. Aristotle was

¹ *De Partibus Animalium*, I, 1, 639 b, 11.

the first to advert to this *historical dialectic of the idea of cause*, and to give the different kinds of cause a place in his doctrine of the principles of being. Consequently, the Aristotelian doctrine of cause is a true development, a transition from the undifferentiated to the differentiated, and nowhere do we realize more clearly than in this doctrine of cause that Aristotle's philosophy is the culmination of all the philosophies which preceded it.

According to Aristotle, metaphysics is rightly called the *theological science*, because God is the highest object of metaphysical inquiry. For, although we may in our analysis of the principles of being descend to the lowest determination, — or, rather, to the lack of all determination, — *materia prima*, we may turn in the opposite direction, and by following the ascending scale of differentiation arrive at the notion of *pure actuality*, or Being in the highest grade of determinateness.

Aristotle, in his *proofs of the existence of God*, did not set aside the teleological argument of Socrates.¹ Devoted as he was to the investigation of nature, and especially to the study of living organisms, he could not fail to be struck by the adaptation everywhere manifest in natural phenomena, and particularly in the phenomena of life. He recognized, however, that the teleological is not the strongest argument for the existence of a Supreme Being. Accordingly, we find him establishing the existence of God by means of proofs more properly metaphysical than was the argument from design. He argues, for example,² that, although motion is eternal, there cannot be an infinite series of movers and moved; there must, therefore, be one, the first in the series, which is unmoved, the *πρώτον κινουὺν ἀκίνητον*. Again,³ he argues that *the actual is, of its nature, antecedent to the potential*. Consequently, before all matter, and before all composition of actual and potential, pure actuality

¹ Cf. *Phys.*, VIII, I, 252 a.

² Cf. *op. cit.*, VIII, 5, 256 a.

³ Cf. *Met.*, XII, 6, 1071 b, 20.

must have existed. Actuality is, therefore, the cause of all things that are, and, since it is pure actuality, its life is essentially free from all material conditions; it is the thought of thought (*νόησις νοήσεως*).

To the question, What does Aristotle understand by the *primum movens immobile* and the *actus purus*? the answer seems to be that by the former of these expressions he meant something other than the Supreme Being. In the *Physics*, where he speaks of *primum mobile*, or rather of the *prima moventia non mota*,¹ he describes the first being as the first in the order of efficient causes, an intelligence, the *primum cælum*. This, which is moved by the sight of the supreme intelligence of God, not, therefore, by any efficient cause, but by a final cause only, sets in motion the whole machinery of efficient causes beneath it. In the *Metaphysics*, however, our philosopher pursues his investigation into the realms beyond the first heaven, and finds that the intelligence which moves by its desirability the soul of the first heaven is the intelligence of intelligence, pure actuality, God.² This is the interpretation of St. Thomas,³ who, while he regards God as the immediate efficient cause of the first motion of the universe, interprets Aristotle to mean that the First Intelligence moves merely by the desire which He inspires, drawing towards Him the soul of the first heaven. And it is natural to expect that in the philosophy of Aristotle there should be a supreme in the physical order as well as a supreme in the metaphysical order; that the metaphysical concept of First Intelligence should complete and round out the physical concept of a first mover.⁴

God is one, for matter is the principle of plurality, and the First Intelligence is entirely free from material conditions. His life is *contemplative thought*; neither providence nor will is

¹ *Phys.*, VIII, 6, 258 b, 12.

² *Met.*, XII, 7, 1072.

³ *Cf. In XII^{um} Met.*, lect. 7.

⁴ *Cf. De Vorges in Revue Neo-Scholastique*, 1894, pp. 304 ff.

compatible with the eternal repose in which He dwells.¹ Nevertheless, Aristotle sometimes speaks of God as taking an interest in human affairs.² The truth is that Aristotle's idea of God was, like Plato's, far from being a clear or even a coherent concept. Aristotle was content with deducing from his philosophical principles the idea of a Supreme Self-Conscious Intelligence, but he had no adequate conception of the relation between self-consciousness and personality. It was left for Christian philosophy to determine and develop the notion of divine person.

We find the same indefiniteness in Aristotle's account of the *origin of the World*. The world, he taught, is eternal; for matter, motion, and time are eternal. Yet the world is caused.³ But how, according to Aristotle, is the world caused? Brentano⁴ believes that Aristotle taught the doctrine of creation *ex nihilo*, and there can be no doubt that St. Augustine and St. Thomas⁵ saw no contradiction in maintaining that a being may be eternal and yet created. The most conservative critics must grant that while Aristotle does not maintain the origin of the world by creation, he teaches the priority of act with respect to potency, thus implying that since the first potency was caused, it must have been caused *ex nihilo*. His premises, if carried to their logical conclusion, would lead to the doctrine of creation.⁶

δ. Physics. Physics, the study of nature, considers existence, not as it is in itself, but so far as it participates in movement (*κινήσεως μετέχει*).⁷ Nature includes everything which has in itself the principle of motion and rest. The works of nature differ from the products of art because, while the latter have no tendency to change (their originating principle being

¹ Cf. *Eth. Nic.*, X, 8, 1178 b, 20.

² *Op. cit.*, X (8), 9, 1179.

³ Cf. *Phys.*, VIII, 1, 251.

⁴ *Die Psychologie des Aristoteles* (1862) and *Ueber den Kreatismus des Aristoteles* (1882).

⁵ St. Augustine, *De Civ. Dei*, II, 4; St. Thomas, *Summa Theologica*, I^a, XLVI, 1.

⁶ Cf. *Met.*, IX, 8, 1049 b, 10; *Phys.*, VIII, 9, 265 a, 22.

⁷ *Met.*, XI, 3, 1061 b, 6.

external to them), nature is essentially spontaneous, that is, self-determining from within.¹ Nature does not, however, develop this internal activity except according to definite law. There is no such thing as accident or hazard: "Nature does nothing in vain."² "Nature is always striving for the best."³ Thus, although Aristotle expressly rejects the Platonic idea of a world-soul, he recognizes in nature a *definite teleological concept, a plan of development*, to which the only obstacle is matter; for matter it is, that, by resisting the form, forces nature, as it were, to be content with the better in lieu of the best. The striving of nature is, therefore, through the less perfect to the more perfect.⁴

Space (τόπος) is neither matter nor form; it is not the interval between bodies. It is "the first and unmoved limit of the enclosing, as against the enclosed," τὸ τοῦ περιέχοντος πέρας ἀκίνητον πρῶτον,⁵ that is to say, the surface (of the surrounding air, water, or solid substance) which is immediately contiguous to the body said to be in space, and which, though it may change, is considered as unmoved, because the circumscribed limits remain the same. Particular space is, therefore, coterminous with extended body, and space in general is coterminous with the limits of the world. Space is actually finite, yet potentially infinite, inasmuch as extension is capable of indefinite increase.⁶

Time (χρόνος), which, like space, is the universal concomitant of sensible existence, is the measure of the succession of motion, ἀριθμὸς κινήσεως κατὰ τὸ πρότερον καὶ ὕστερον.⁷ The only reality in time is the present moment; in order to join the past and the future with the present, that is, in order to measure motion, mind is required. *If there were no mind, there would be no time.*⁸

¹ *Phys.*, II, 1, 192 b, 14.

² *De Caelo*, I, 4, 271 a, 33.

³ *Cf. De Part. An.*, IV, 2, 677 a, 15.

⁴ *Phys.*, II, 8, 199; *De Generatione Animalium*, IV, 4, 770 b, 9.

⁵ *Phys.*, IV, 4, 212 a, 20.

⁶ *Cf. Met.*, XI, 10, 1067.

⁷ *Phys.*, IV, 11, 219 b, 1.

⁸ *Op. cit.*, IV, 14, 223 a, 25.

Movement (κίνησις) is the mode of existence of a potential being becoming actualized, ἡ τοῦ δυνάμει ὄντος ἐντελέχεια ἥ τοιοῦτον.¹ Motion does not require, nor does it postulate, a vacuum, since we may imagine that another body leaves the space which the moving body enters.² Besides *substantial change*, of which matter is the substratum, three kinds of motion are recognized by Aristotle, — *quantitative*, *qualitative*, and *spatial* (φορά).

In his *stoichiology* Aristotle adopts the four elements, or radical principles, which Empedocles introduced. He teaches, however, that the celestial space is filled with a body different from the four elements. This seems to be the part assigned by him to *ether*.³ Ether, then, is neither a fifth element entering with the other four into the constitution of the terrestrial world, nor, as is sometimes maintained, an undifferentiated substratum, like the ἀπειρον of Anaximander, from which the four elements originated. It is the constituent of celestial bodies. The natural motion of ether is circular; that of the other elements is upward or downward, according as they are naturally endowed with lightness or with heaviness. It is hardly necessary to remark that until Newton's time there existed the belief that each particular body moved towards its own place, upward or downward, in virtue of the light or heavy elements which it contained.

Aristotle's *astronomical* doctrines were not in advance of the notions of the age to which he belonged. The earth, the center of the cosmic system, is spherical and stationary. It is surrounded by a sphere of air and a sphere of fire. In these spheres are fixed the heavenly bodies, which daily revolve round the earth from east to west, though seven of them revolve in longer periods from west to east. Outside all is the heaven of the fixed stars, the πρῶτος οὐρανός. It is next to the Deity, who imparted to its circumference a circular motion, thus mediately putting in motion the rest of the cosmic machinery.

¹ *Phys.*, III, 1, 201 a, 10.

² *Cf. op. cit.*, IV, 7, 8, 214, 215.

³ *De Meteoris*, I, 3, 339; *Phys.*, VIII, 6, 259.

Aristotle agrees with Plato in teaching that the first heaven, like all the other heavenly bodies, is animated.

It is in his *biological doctrines* that Aristotle shows how far he excels all his predecessors as a student of nature. When we consider the difficulties with which he had to contend, — he never dissected a human body, and probably never examined a human skull; he did not in any adequate sense dissect the bodies of animals, although he observed their entrails, — when we remember that he was obliged to reckon time without the aid of a watch, and to observe degrees of temperature and atmospheric changes without the aid of a thermometer or a barometer, we realize that the words of superlative praise in which Cuvier, Buffon, and others speak of him as a naturalist are far from being undeserved. His mistakes¹ are due to conditions which limited his power of personal observation. Despite these limitations he did observe a great deal, and observed accurately, discussing, classifying, comparing his facts before drawing his conclusions. His *Histories of Animals*, for example, is a vast record of investigations made by himself and others on the appearance, habits, and mental peculiarities of the different classes of animals.

Life is defined as the power of self-movement.² The principle that all action is development applies here as elsewhere in nature. Everywhere in the world of natural phenomena there is *continuity*; life and its manifestations offer no exception. Non-living matter gives rise to living things: the sponge is intermediate between plants and animals;³ the monkey (πῖθηκοι, κῆβοι, κυνοκέφαλοι) is intermediate between quadrupeds and man.⁴ The lower animals are divided into nine classes: viviparous quadrupeds, oviparous quadrupeds, birds, fishes, whales, mollusks, Malacostraca, Testacea, and insects; of these the first

¹ Cf. *Historia Animalium*, I, 8, 491, where he says that the hinder part of the skull is empty. ² *De An.*, II, 1, 412. ³ *De Part. An.*, IV, 5, 681 a, 12.

⁴ *Hist. An.*, II, 502, 8. It is unnecessary to remark that Aristotle has reference merely to the external appearance and the means of locomotion.

five classes are blood-possessing, the latter four being bloodless. In his *anatomical studies* he divided organs into ὁμοιομερῆ (made up of parts which are like the whole organ) and ἀνομοιομερῆ (made up of parts which are unlike the whole, as the hand is made up of the palm and fingers).¹ *Digestion* and *secretion* are the results of a cooking process.²

The *soul* is the principle of that movement-from-within which life has been defined to be. It is the form of the body, Ψυχὴ ἐστὶν ἐντελέχεια ἡ πρώτη σώματος φυσικοῦ δυνάμει ζῶν ἔχοντος,³ and its relation to the body is generically the same as that of form to matter. *Soul*, then, is not synonymous with *mind*: it is not merely *the principle of thought*; it is *the principle of life*, and psychology is the science of all vital manifestations, but more particularly of sensation and thought. Thought is peculiar to man; but, since in the hierarchy of existence the more perfect contains the less perfect, the study of the human soul includes all the problems of psychology.

What, then, is the human soul? It is not a *mere harmony of the body*, as some of the older philosophers taught.⁴ It is not *one of the four elements*, nor is it *a compound of the four*, because it exhibits powers (of thought) which transcend all the conditions of material existence.⁵ In no sense, therefore, can it be said to be *corporeal*. And yet it is united with the body, being, according to its definition, the form of the body. For the body has mere potency of life; all the actuality of the body comes from the soul. The soul is *the realization of the end for which the body exists*,—the τὸ τοῦ ἕνεκα of its being. *Soul and body*, although distinct, *are one substance*, just as the wax and the impression stamped upon it are one.⁶ It is worthy of note that, as in metaphysics Aristotle distinguishes, without separating, the universal from the individual, so in psychology he maintains

¹ *Hist. An.*, I, 6, 491.

² *De Part. An.*, IV, 3, 677 b, 14.

³ *De An.*, II, 1, 412 a, 28.

⁴ *Op. cit.*, I, 4, 408 a, 1.

⁵ *Op. cit.*, III, 4, 429 a, 18.

⁶ *Op. cit.*, II, 1, 412 b, 8.

on the one hand the *distinction*, and on the other the *substantial unity* of soul and body in man.

The soul, the radical principle of all vital phenomena, is one ; still we may distinguish in the individual soul several *faculties* (*δυνάμεις*) which are not parts of the soul but merely different phases of it according as it performs different vital functions. The soul and its faculties are, to use Aristotle's favorite comparison, like the concave and the convex of a curve, — different views of one and the same thing. The faculties of the human soul are: (1) *nutritive* (*θρεπτικόν*), (2) *sensitive* (*αἰσθητικόν*), (3) *appetitive* (*ὀρεκτικόν*), (4) *locomotive* (*κινητικόν*), and (5) *rational* (*λογικόν*). Of these, the sensitive and the rational faculties claim special attention.¹

Sensation is the faculty "by which we receive the forms of sensible things without the matter, as the wax receives the figure of the seal without the metal of which the seal is composed."² This *form without the matter* (*εἶδος αἰσθητὸν* or *τύπος*) is what the schoolmen called the *species sensibilis*; it differs essentially from the "effluxes" of which Empedocles spoke, for these latter are forms "with matter." Besides, the Aristotelian *τύπος* is not, like the "efflux," a *diminished object*, but a medium of communication between object and subject. Sensation is a movement of the soul,³ and, like every other movement, it has its active and its passive phase. The active phase is what we call the *stimulus*; the passive phase is the *species*. Now, the active and passive phases of a movement are one and the same motion. The *species*, therefore, is merely the passive phase of the *stimulus*, or the operation of the object, as Aristotle calls it. This is the explicit teaching of the treatise *De Anima*. For example, ἡ δὲ τοῦ αἰσθητοῦ ἐνέργεια καὶ τῆς αἰσθήσεως ἡ αὐτὴ μὲν ἐστὶ καὶ μία, τὸ δ' εἶναι οὐ ταῦτόν αὐταῖς.⁴

¹ *De An.*, II, 2, 413 b, 12; II, 3, 414 a, 31.

² *Op. cit.*, II, 12, 424 a, 18.

³ *De Somno*, 2, 454 a, 7.

⁴ III, 2, 425 b, 26; for different readings, cf. Rodier, *Traité de l'Âme*, I, 152.

Aristotle distinguished five *external senses*, to each of which corresponds its proper object (*αἰσθητὸν ἰδίου*). Besides objects proper to each sense, there are objects common (*κοινὰ*) to several senses, such as movement, and there is the *sensible per accidens*, or inferential object (*κατὰ συμβεβηκός*), such as substance.¹

Among the internal senses the most important is the *common*, or *central sense* (*αἰσθητήριον κοινόν*). By it we distinguish the separate communications of the external senses, and by it also we perceive that we perceive. It has its seat not in the brain, but in the heart. Having no idea of the function of the nerves, Aristotle naturally regarded the veins as the great channels of communication, and the heart as the center of functional activity in the body.² Moreover, he observed that the brain substance is itself incapable of responding to sensation stimulus.³

In addition to the central sense, *memory* and *imagination* are mentioned by Aristotle as internal senses. Imagination, as a process (*φαντασία*), is the movement resulting from the act of sensation; as a faculty, it is the locus of the pictures (*φαντάσματα*), which are the materials out of which reason generates the idea.⁴ Without the phantasm it is impossible to reason (*νοεῖν οὐκ ἔστιν ἄνευ φαντάσματος*).⁵

Intellect (*νοῦς*) is the faculty by which man acquires intellectual knowledge. It differs from all the sense faculties in this, that while the latter are concerned with the concrete and individual, it has for its object the abstract and universal.⁶ "It is well called the *locus* of ideas," says Aristotle,⁷ "if we understand that it is the potential source of ideas, for in the beginning it is without ideas, it is like a smooth tablet on which nothing is written." We must always bear in mind this twofold relation of intellect to sense, namely, *distinction* and *dependence*.

¹ *De An.*, II, 6, 418 a, 8.

⁴ *De An.*, III, 7, 431 a, 14.

² *De Juventute et Senectute*, 3, 469 a, 10.

⁵ *De Memoria et Reminiscētia*, 449 b, 31.

³ *Cf. De Part. An.*, II, 10.

⁶ *De An.*, II, 5, 417 b, 22.

⁷ *Op. cit.*, III, 4, 429 a, 27, and 429 b, 31.

The process by which the intellect rises from the individual to the universal has already been described in part. It is a process of *development*. The material on which the intellect works is the individual image (phantasm), or the individual object; the result of the process is the intelligible form, or idea, and the process itself is one of *unfolding* the individual so as to reveal the universal contained in it. The intellect does not create the idea; it merely *causes the object which was potentially intelligible to become actually intelligible*, "in the same way as light causes the potentially colored to become actually colored."¹ The expressions "developing," "unfolding," "illuminating," are, of course, metaphorical: what really takes place is a process of *abstraction*, a separation of the individuating qualities from the universal, or an *induction*, that is to say, a bringing together of individuals under a universal image, — "just as in the routed army one man must stand so as to become the center round which others may group themselves."²

It is evident, therefore, that while the intellect does not create the concept, it is active in causing the object to become actually intelligible. There is, however, a subsequent stage in the process. Once the object is rendered intelligible, it impresses itself on the intellect in precisely the same way as the sensible object impresses its *species* on the senses. The intellect in this second stage of the process is called the *passive intellect* (νοῦς παθητικός), while in the first stage of the process it is called τὸ ποιούν. It is worthy of remark that although it is usual to speak of the *active and passive intellect*, Aristotle never speaks of a νοῦς ποιητικός, always designating the active intellect by means of the present participle.

From this it is clear that in Aristotle's psychology there is no room for the doctrine of *innate ideas*. All knowledge comes through the senses, nothing being innate in the mind except the native power of the active intellect by which it discovers in

¹ *De An.*, III, 5, 430a, 10.

² *Anal. Post.*, II, 15, 100.

the concrete and individual the abstract and universal elements of thought contained therein. But *what is this active intellect?* What is its relation to the $\psi\upsilon\chi\eta$, the vital principle in man? These are questions which have vexed the commentators and interpreters of Aristotle from the days of Theophrastus down to our own time. There is even greater difficulty in determining what Aristotle meant by the passive intellect. Where there is so complex a diversity of opinion it is perhaps hazardous to classify interpretations; still, it seems that the commentators and interpreters may be included under the heads *Transcendentalists* and *Anthropologists*. Eudemus, Alexander of Aphrodisias, the Arabians of the Middle Ages, and most modern commentators since the time of Hegel understand the active intellect to mean something apart from, or transcending in some way, the individual soul, while as to the nature of the passive intellect they are in a state of hopeless confusion. Theophrastus, Philoponus, Themistius, Simplicius, Boethius, and the greater number of the schoolmen, understand the active intellect to mean a faculty of the individual soul; while many of the schoolmen identify the passive intellect with the active, making the difference between the two powers to consist merely in a difference between two phases of the same faculty. It will be sufficient here to give the words in which Aristotle describes the active intellect, without entering into the question of interpretation. He speaks, in *De Anima*, III, 4, 429 a, of the intellect as *separate and unmixed*; in the following chapter¹ he describes the active intellect as being "*alone separate, eternal, and immortal*" (430 a), and in *De Generatione Animalium*, II, 3, 736 b, 28,

¹ Wallace (*Aristotle's Psychology*, p. cvi) says that "the stumbling-block which has prevented students from understanding Aristotle's position lies perhaps chiefly in separating the fourth and fifth chapters of the third book (*De Anima*) from each other, as if Aristotle were speaking of one reason in one chapter and of another in the other." Cf. also *ibid.*, pp. cvii ff.; Brentano, *Psych. des Arist.*, p. 180; Rodier, *Traité de l'Âme*, 2 vols., Paris, 1900; *Philosophical Review* (May, 1902), Vol. XI, pp. 238 ff.

he describes it as coming from without (*θύραθεν*), and as *divine* (*θεῖον*). It must, however, be borne in mind that the chapters in which Aristotle enunciates his theory of knowledge are of a fragmentary nature, and, moreover, that this portion of Aristotle's psychological treatise deals with a question which no modern school with the exception of the transcendentalist school has attempted to solve. It is, therefore, not a matter for surprise that in expounding Aristotle so many modern writers have fallen into the error of interpreting him in the terminology of transcendentalism, thus illustrating the adage, "Aristotelem nonnisi ex ipso Aristotele intelliges."¹

By reason of its intellectual function, which it performs without intrinsic dependence on the bodily organism, and by which it transcends the conditions of matter, the soul is *immaterial*² and *immortal*.³ Aristotle's doctrine of immortality is, however, conditioned by his doctrine of the active intellect. If the active intellect is something separate from the individual soul, an impersonal intellect, common to all men, — and this is the interpretation followed by Alexander, by the Arabians, and by many modern scholars, — it does not appear how Aristotle could hold that the soul is in any true sense of the word endowed with personal immortality.

With regard to *will*, in place of Plato's vague, unsatisfactory notion of *θυμός*, we find the definite concept of *βούλησις*, which may be described as a consilience of reason and desire. Will is rational appetite; it is the desire of good as apprehended by reason,⁴ and because it is preceded by a rational apprehension

¹ For summary of the literature on this question, cf. Ritter and Preller, *op. cit.*, p. 543, note *f*. See also Wallace, *Aristotle's Psychology* (Introd., pp. xcvi–cxvi). For scholastic commentary on Aristotle's doctrine, cf. Sylvester Maurus, *Aristotelis Opera* (Rome, 1668), Vol. IV, pp. 303 ff.

² Cf. *De An.*, III, 4. The chapter is devoted to the study of "that part of the soul whereby it knows and understands." The word *χωριστός*, which there occurs is evidently used in the sense of "free from matter."

³ *De An.*, I, 4, 408b, 18.

⁴ *Op. cit.*, III, 10, 433a, 23.

of good, it is *free*. This view of *freedom of choice* (*προαίρεσις*) is supported by the recognized voluntariness of virtue, and by the equally well recognized fact that man is held accountable for his actions.¹ Reason in its function of suggesting the best means by which an end is to be attained is called *practical*.

Before proceeding, however, to treat of ethics, which is the science of human conduct according to the principles of practical reason, it is necessary to mention the last division of theoretical philosophy, namely, mathematics.

c. **Mathematics** deals with immovable being, thus differing from physics, which has for object being subject to motion.² It differs from metaphysics in this, that it deals with corporeal being under the determination of quantity, while metaphysics has for its object being in general, under its highest determinations, such as act and potency, cause and effect.³

C. **Practical Philosophy** includes the science of political government and organization as well as the general questions of moral science.

1. *The supreme good* of man is happiness. Of this no Greek had the least doubt. The word *εὐδαιμονία* has, however, more of an objective meaning than our word *happiness*: it is more akin to *well-being* or *welfare*. But how is this well-being to be attained? What is it that constitutes happiness? Happiness is determined by the end for which man was made, and the end of human existence is that form of good which is peculiar to man, the good which is proper to a rational being. Now, reason is the prerogative of man. It should, therefore, be the aim of man's existence to live conformably to reason, — to live a life of *virtue*.⁴ Nevertheless, Aristotle would not exclude wealth and pleasure from the idea of human happiness; for wealth is necessary for the external manifestation of virtue, and pleasure is the natural reward of a virtuous life. Happiness

¹ *Eth. Nic.*, III, 7, 1113 b, 21.

² *Phys.*, II, 2, 193 b, 22.

³ *Cf. Met.*, VI, 1, 1025 b.

⁴ *Eth. Nic.*, I, 6, 1097.

also includes friendship, health, — in a word, all the gifts of fortune.¹

2. *Virtue*, while it is not the only constituent of happiness, is the indispensable means of attaining happiness. It is not a mere feeling, but rather a fixed quality or habit of mind (*ἔξις*). Now, mind must first of all hold the lower functions, and especially the passions, in subjection, and then it must develop its own powers. Thus, we have *moral virtue* and *intellectual virtue*.

(a) *Moral virtue is a certain habit of the faculty of choice, consisting in a mean (μεσότης) suitable to our nature and fixed by reason in the manner in which a prudent man would fix it.*² It is a habit, — that is, a fixed quality. It consists in a mean between excess and defect. Courage, for example, preserves the mean between cowardice and reckless daring. Virtue, it is true, is impossible without moral insight. Still, we must not identify these two as Socrates did when he reduced all virtue to knowledge. There are many kinds of virtue, for virtue is a quality of the will, and the defects and excesses to which the will may lead us are many, as will be seen by the following schema :

<i>Defect</i>	<i>Mean</i>	<i>Excess</i>
Cowardice	Courage	Rashness
Insensibility	Temperance	Intemperance
Illiberality	Liberality	Prodigality
Pettiness	Munificence	Vulgarity
Humble-mindedness	High-mindedness	Vaingloriousness
Want of Ambition	Right Ambition	Over-ambition
Spiritlessness	Good Temper	Irascibility
Surliness	Friendly Civility	Obsequiousness
Ironical Depreciation	Sincerity	Boastfulness
Boorishness	Wittiness	Buffoonery
Shamelessness	Modesty	Bashfulness
Callousness	Just Resentment	Spitefulness. ³

¹ *Eth. Nic.*, I, 9, 1099 a, 31; V, 2, 1129 b.

² *Op. cit.*, II, 6, 1106 b, 36.

³ Cf. Wallace, *Outlines*, p. 100.

Justice (δικαιοσύνη) in its generic meaning signifies the observance of the right order of all the faculties of man, and in this sense it is synonymous with virtue. In a more restricted sense, justice is the virtue which regulates man's dealings with his fellow-man. It is divided into *distributive*, *corrective*, and *commutative* justice.¹

(b) *The intellectual virtues* are perfections of the intellect itself, without relation to the other faculties. We have (1) the perfections of the scientific reason, namely, *understanding* (νοῦς), *science* (ἐπιστήμη), and *wisdom* (σοφία), which are respectively concerned with first principles, demonstration, and the search for highest causes; and (2) the perfections of the practical reason, namely, *art*, which is referred to *external* actions (ποιεῖν), and *practical wisdom*, which is referred to actions the excellence of which depends on no external result (πράττειν).²

The most characteristic of Aristotle's ethical teachings is the superiority which he assigns to intellectual over ethical virtue, and the most serious defect in his ethical system is his failure to refer human action to future reward and punishment.

3. In his *political doctrines* Aristotle starts with the principle that man is by nature a social being (πολιτικὸν ζῷον), and is forced to depend on the social organization for the attainment of happiness. Man's social life begins in the family; for the family is prior to the state. The state is consequently bound to keep the family intact, and, in general, its mission is the advancement and development of its subjects, — the lifting up of the people by the just administration of law to a higher plane of moral conduct.³ Aristotle combats the *state absolutism* of Plato.

There are three ultimate *forms of government*, — monarchy, aristocracy, and the republic. The best form of government is

¹ *Eth. Nic.*, V, 1, 1129 a, 26; V, 2, 1130 b, 39.

² For distinction between ποιησις and πράξις, cf. Zeller, *Aristotle*, etc., Vol. I, p. 182.

³ *Politica*, III, 9, 1280 b, 30.

that which is best suited to the character of the people (*Politica*, III, 17). Thus, although monarchy is the ideal, the best attainable form seems to be an aristocracy, not of wealth nor of birth but of intellect, — a true aristocracy, a government of the best.¹

D. Poietical Philosophy. Under this head Aristotle treats the *theory of art*. *Art*, he teaches, is traceable to the spirit of imitation, and consists in the realization in external form of the true idea, — a realization which is not limited to mere copying, but extends also to the perfecting of the deficiencies of nature by grouping the individual phenomena under the universal type.² History merely copies; poetry idealizes and completes the work of history: *Poetry is more philosophical and more elevated than history.*³

Aristotle's analysis of the *beautiful* is, like Plato's, confined to a study of the objective constituents of beauty. These he reduces to *order* and *grandeur*, which are found especially in moral beauty. So vague and indefinite is this analysis that Aristotle was obliged, as we have seen, to base his theory of art on the realization of the essence, without referring art at all to the notion of the beautiful. The aim of art is the calming, purifying, and ennobling of the affections.⁴

Historical Position. It is difficult to form a true estimate of Aristotle's philosophy, and the difficulty arises, strange as this may seem, from our too great familiarity with many of the notions which Aristotle introduced into human science. The basic ideas of his philosophical system have become the commonplaces of elementary education; they have found their way into the vocabulary of our everyday life, and have impressed themselves indelibly on the literature of Western civilization.

¹ *Pol.*, IV, 7, 1293 b, 3. Aristotle (*Pol.*, III, 15, 1286 b, 20) admits that a polity in which the collective voice of the people shall hold sovereign power may, owing to the spread of population, become the general form of government.

² *Eth. Nic.*, VI, 4, 1140 a, 10.

³ *De Poetica*, 9, 1451 a, 44.

⁴ *Cf. op. cit.*, 6, 1449 b, 24.

The terminology, the invention of which is one of Aristotle's chief titles to preëminence, has become indissolubly associated with the exposition of Christian theology, and forms, so to speak, the alphabet of our catechetical instructions. All this has made it difficult for the modern reader to appreciate the importance of Aristotle's contributions to philosophy. *Consuetudo vilescent!* It is necessary, therefore, to forget how familiar many of Aristotle's discoveries have become, to go back in imagination to the time when they were first enunciated, and in this way to realize, if we can, the breadth and depth of a mind that could succeed in accomplishing such a vast amount of original work as to entitle him to be considered the founder of logic, the author of the first treatise on scientific psychology, the first natural historian, and the father of the biological sciences. Placing ourselves at this point of view, we shall be less inclined to single out the undeniable defects of Aristotle's philosophy, finding it a more natural as well as a more congenial task to compare Aristotle with his predecessors in the history of Greek speculation.

Aristotle's philosophy is the synthesis and culmination of the speculations of pre-Socratic and Socratic schools. His doctrine of causes is an epitome of all that Greek philosophy had up to his time accomplished. But it is especially with Plato, his master, that Aristotle is to be compared, and it is by his additions to Platonic teaching that he is to be judged. Plato built out of the ruins of pre-Socratic speculation a complete metaphysical structure according to a definite plan, — a structure beautiful in its outlines, perfect in its symmetry, but insecure and unstable, like one of those golden palaces of fairyland, which we fear to approach and examine lest it vanish into airy nothingness. Aristotle, on the contrary, drew his plan with a firmer hand; he laid the foundation of his philosophy deep on the rock bottom of experience, and although all the joints in the fabric are not equally secure, the care and consistency with which the design

is executed are apparent to every observer. It was left for Scholastic philosophy to add the pinnacle to the structure which Aristotle had carried as far towards completion as human thought could build unaided. If Plato has been called the *Sublime*, Aristotle must be called the *Profound*, — a title which, when applied to a philosopher, should be the expression of higher praise; for

Wisdom is ofttimes nearer when we stoop
Than when we soar.

CHAPTER XII

THE PERIPATETIC SCHOOL

Sources. Besides our *primary sources*, consisting of treatises and commentaries of the philosophers of Aristotle's school, we have, as *secondary sources*, the works of Diogenes Laertius and the references made by Cicero, who, it should be said, is more trustworthy when he mentions the Peripatetics than when he speaks of the pre-Socratic philosophers.

Theophrastus of Lesbos was born about the same year as Aristotle. He seems to have become Aristotle's disciple even before the death of Plato. After Aristotle's death he ruled the Peripatetic school as scholarch for about thirty-five years. He wrote many works, of which the best known are two treatises on botany and his *Ethical Characters*, the latter consisting of lifelike delineations of types of human character. He extended and completed Aristotle's philosophy of nature, devoting special attention to the *science of botany*. In his ethical doctrines he insisted on the *choregia* secured to virtue by the possession of external goods.¹

Of the life of **Eudemus of Rhodes** little is known except that he and Theophrastus were disciples of Aristotle at the same time. It is probable that he continued to belong to the school

¹ Cf. Cic., *Tusculana Disputationes*, V, 8.

when Theophrastus became scholarch. He is the author of the *Eudemian Ethics*, which, however, is merely a redaction of Aristotle's notes, or at most a treatise intended to supplement Aristotle's *Nicomachean Ethics*.¹ In his writings and doctrines Eudemus shows far less originality and independence than does Theophrastus.

Aristoxenus of Tarentum, known as the *Musician*, introduced into the Peripatetic philosophy many of the ideas of the Pythagoreans, attaching especial importance to the notion of *harmony*.

Strato of Lampsacus, the *Physicist*, succeeded Theophrastus as scholarch in 288 B.C., and continued to preside over the school for eighteen years. Like his predecessor, he devoted his attention to *the study of nature*, manifesting, however, a tendency to discard from natural philosophy the teleological concept and the idea of the incorporeal.

Demetrius of Phalerus and others of the earlier Peripatetics confined their literary labors to general history and *the history of opinions*.

Among the later Peripatetics mention must be made of **Andronicus of Rhodes**, who edited the works of Aristotle (about 70 B.C.). To the second century of our era belong **Alexander of Aphrodisias**, the *Exegete*, and **Aristocles of Messene**. To the third century belongs **Porphyry**, and to the sixth century **Philoponus** and **Simplicius**. All these, though they belonged to Neo-Platonic or Eclectic schools, enriched the literature of the Peripatetic school by their commentaries on Aristotle. The physician **Galen**, born about 131 A.D., is also reckoned among the interpreters of Aristotle.

Retrospect. The second period of Greek philosophy has been characterized as *subjectivo-objective*. Compared with the preceding period, it is subjective, — that is, it diverts the mind of the inquirer from the problems of nature to those of thought. Compared with the period immediately following, it is objective, — that is, it is not concerned solely with ethical problems and

¹ Cf. Zeller's *Arist.*, etc., Vol. I, p. 97, n.

the problems of the value of knowledge ; it is not wholly subjective. Historically the period is short, not extending over more than three generations. Yet in that brief space of time much was accomplished. It is, perhaps, because the period was so short, and because it was dominated by three men, each of whom stood to his predecessor in the relation of personal disciple, that there exists so perfect an organic unity among the philosophies of Socrates, Plato, and Aristotle. The philosophy of Socrates was the philosophy of the *concept*, — it was concerned with the inquiry into the conditions of scientific knowledge and the basis of ethics. The philosophy of Plato was the philosophy of the *Idea*, — it claimed to be a scientific study of reality, a system of metaphysics. The philosophy of Aristotle was centered around the notion of *essence*, and essence implies the fundamental dualism of matter and form. It is in Aristotle's philosophy, therefore, that the objective and subjective are united in the highest and most perfect synthesis ; for organic unity is compatible with growth in organic complexity. The concept is the simplest expression of the union of subject and object ; next in complexity is the Idea, which is a form of being and knowing existing apart from what is and what is known, while highest in complexity is the essence, which is in part the matter and in part the form existing in the reality and also in the object of knowledge. From Socrates to Aristotle there is, therefore, a true development, the historical formula of which is ideally compact, — *concept*, *Idea*, and *essence*.

THIRD PERIOD. POST-ARISTOTELIAN PHILOSOPHY

The death of Aristotle marks the end of the Golden Age of Greek philosophy. From Thales to Socrates was the period of beginnings; from Socrates to Aristotle, the period of highest perfection; with the opening of the post-Aristotelian period begins the age of decay and dissolution. To this third period belong the *pantheism of the Stoics*, the *materialism of the Epicureans*, and the final relaxation of all earnest philosophical thought, culminating in the absolute *scepticism of the Pyrrhonists*. The period of highest perfection in philosophy was also the period of the political greatness of Greece, and the causes which brought about the political downfall of Greece are in part accountable for the decay of Greek philosophy.

Sixteen years before the death of Aristotle, the battle of Chæronea (338 B.C.) was fought, — the battle in which the doom of Greece was sealed. There followed a series of unsuccessful attempts to shake off the Macedonian yoke. In vain did Demosthenes strive to arouse in the breasts of the Athenians the spirit of the days of Marathon and Thermopylæ; the iron hand of military despotism crushed the last manifestations of patriotism. Then the Roman came, to succeed the Macedonian, and Greece, the fair home of philosophy in the West, was made a province of a vast military and commercial empire.

The loss of political freedom was followed by a period of torpor of the creative energies of the Greek mind.¹ Speculation, in the highest sense of constructive effort, was no longer possible, and philosophy became *wholly practical* in its aims. Theoretical knowledge was valued not at all, or only in so far as it contributed to that bracing and strengthening of the moral fiber

¹ This opinion of Zeller and others is controverted by Benn, *The Greek Philosophers*, Vol. I, p. xi.

which men began to seek in philosophy, and for which alone philosophy began to be studied. Philosophy thus came to occupy itself with ethical problems, and to be regarded as a refuge from the miseries of life. When men ceased to count it an honor to be a citizen of Hellas, they turned to philosophy in order to become citizens of the world; and so philosophy assumed a *more cosmopolitan character*. Imported into the Roman Empire, it failed at first to take root on Roman soil because in the Latin contempt of the *Græculus* was included a contempt for all things Greek. Gradually, however, philosophy gained ascendancy over the Roman mind, while in turn the Roman love of the practical asserted its influence on Greek philosophy.

All these influences resulted in (1) a disintegration of the distinctively Greek spirit of philosophy and the substitution of a cosmopolitan spirit of eclecticism; (2) a centering of philosophical thought around the problems of human life and human destiny; and (3) the final absorption of Greek philosophy in the reconstructive efforts of the Greco-Oriental philosophers of Alexandria.

But, while metaphysics and physics were neglected in this anthropocentric movement of thought, the mathematical sciences, emancipating themselves from philosophy, began to flourish with new vigor. The astronomers of Sicily and later those of Alexandria stand out of the general gloom of the period as worthy representatives of the Greek spirit of scientific inquiry.

The principal schools of this period are: (1) *the Stoics*, (2) *the Epicureans*, (3) *the Sceptics*, (4) *the Eclectics*, (5) *the mathematicians and astronomers*. A separate chapter will be devoted to *The Philosophy of the Romans*.

CHAPTER XIII

THE STOICS

Sources. All the writings of the earlier Stoics, with the exception of a few fragments, have been lost. We possess, indeed, the complete works of the later Stoics, — *Seneca, Epictetus, Marcus Aurelius, Heraclitus, and Cornutus*; but these philosophers lived under the Roman Empire, at a time when foreign influences had substituted new elements for the doctrines which had been characteristic of the school at the beginning of its existence. We are obliged, therefore, to rely for our knowledge of early Stoicism on writers like *Cicero, Plutarch, Diogenes Laertius, Sextus Empiricus*, and the Aristotelian commentators, who, however, do not always distinguish between the earlier and the later forms of Stoicism. Consequently, it will be found more satisfactory first to give a history of the Stoic school, and then to describe the Stoic doctrine as a whole, without attempting to determine the contributions made by individual members of the school.

History of the Stoic School. (*a*) *Greek Stoics.* Zeno of Cittium (350–258 B.C.), the founder of the Stoic school, was born at Cittium in Cyprus in the year 350 B.C. He was at first a merchant, but owing, it is said, to a shipwreck in which he lost a considerable part of his wealth, he repaired to Athens with the intention of pursuing the study of philosophy. On reading the *Memorabilia* of Xenophon and the *Apology* of Plato, he was impressed with the remarkable character of Socrates, and was led to attach himself to the school of Crates, the Cynic, who appeared to reproduce in his own life and manners the character of the sage. Later on, repelled, no doubt, by the coarseness and vulgarity of the Cynics, he became successively a disciple of Stilpo, the Megarian, and of Xenocrates, the ruler of the Academy. About the year 310 B.C. he founded a school of his own, which by reason of his habit of teaching in the Painted Porch (Στοά) came to be known as the *Stoic* school. He reached an advanced age and, according to the account given by Diogenes and others, ended his life by suicide. His writings have all been lost.

Cleanthes succeeded Zeno as master of the Stoa. He is said to have been originally a pugilist. Zeno characterized the mental temperament of Cleanthes by comparing him to a hard slab on which it is difficult to write, but which retains indefinitely whatever is written on it. True to this description, Cleanthes preserved the teachings of his master, but showed himself incapable of expanding them into a more complete system.

He is the reputed author of a *Hymn to the Most High*, preserved by Stobæus.¹

Chrysippus, who succeeded Cleanthes, was born at Soli, in Cilicia, in the year 280 B.C. He was more original than Cleanthes, and under his direction the Stoic school reached its full development. Among his disciples were **Zeno of Tarsus**, **Diogenes of Seleucia**, and **Antipater of Tarsus**, whose pupil, **Panætius** (180–111 B.C.), introduced Stoicism into the Roman world.

(b) *Roman Stoics*. Among the Roman Stoics the best known are **L. Annæus Cornutus** (A.D. 20–66), **M. Annæus Lucanus** (A.D. 39–65), **Seneca** the younger (A.D. 3–65), **Persius**, the satirist (A.D. 34–62), **Epictetus**, the philosopher-slave (flourished A.D. 90), and the Emperor **Marcus Aurelius** (A.D. 121–180).

It is a fact worthy of note that Cleanthes, Seneca, and Lucan committed suicide in accordance with what as we shall see was one of the ethical doctrines of the school, imitating in this the example of the founder.

STOIC PHILOSOPHY

General Idea of Stoic Philosophy. The Stoics evidently considered themselves the true disciples of Socrates, and it was, without doubt, from Socratic principles that they deduced their *idea of the aim and scope of philosophy*. We have seen that Zeno was first led to philosophy by the hope of finding in it consolation for the loss of his temporal goods, and when he came to establish his school he took for his starting point the Socratic doctrine that knowledge is virtue, making the pursuit of knowledge (philosophy) and the cultivation of virtue synonymous. When, however, the Stoics set about discovering a *systematic basis* for their ethical teachings, they went back to pre-Socratic systems, and drew largely from the physical doctrines of Heraclitus. Now, there were two tenets in the Heraclitean philosophy which recommended themselves in a special manner to the Stoics: (1) that all individual things are but the ever-changing manifestations, or apparitions, of the ever-enduring fire, and (2) that there is but one law, which governs the actions of men, as well as the

¹ Cf. Zeller's *Stoics, etc.*, p. 41, n.; Ritter and Preller, *op. cit.*, p. 394, note *a*.

processes of nature. Consequently, the Stoics made these principles the foundation of the science of human conduct. At the same time they did not hesitate to supplement the physics of Heraclitus by borrowing from Aristotle's physical doctrines. They were influenced, too, by Antisthenes' nominalism and by his opposition to the Platonic theory of Ideas, and in their theological doctrines they made use of the Socratic and Platonic teleology. All these elements they amalgamated into a consistent system. Logic and physics they made subservient to ethics, on the principle that the theoretical should be subordinated to the practical.

We have, therefore, three *divisions of Stoic philosophy*: (1) *Logic*, including the theory of knowledge; (2) *Physics*, including theology; and (3) *Ethics*, the hegemonic science.

Stoic Logic. It was probably Zeno who first gave to logic the name by which it is now known, though this is by no means certain. The logic of the Stoics was simply the *Analytic* of Aristotle supplemented by a more adequate treatment of the *hypothetical syllogism* and by the addition of the problem of the *criterion of truth*. To the latter question they devoted special attention, and, in their solution of it, developed the Stoic theory of knowledge.

Theory of knowledge. 1. The Stoics start with the Aristotelian principle that all intellectual knowledge arises from sense-perception. *Sense-perception* (αἴσθησις) becomes *representation*, or *imagination* (φαντασία), as soon as it rises into consciousness.¹ During the process of sense-perception the soul remains passive, the object producing its image on the mind, just as the seal produces its impression on wax. The process was, therefore, called a *τύπωσις*, although Chrysippus is said to have substituted the word *ἐρεπόλωσις*, alteration of the soul.² When the object of knowledge is removed from the presence of the senses, we retain a memory of it, and a large number of memories constitutes *experience* (ἐμπειρία).

¹ *Placita*, IV, 12; Diels, *op. cit.*, p. 401.

² Sext., *Mathem.*, VII, 228.

2. The next step is the *formation of concepts*. Concepts are formed either (a) *spontaneously*, that is, when, without our conscious coöperation, several like representations fuse into universal notions (*προλήψεις*, or *κοινὰ ἔννοιαι*); or (b) *consciously*, that is, by the reflex activity of the mind, which detects resemblances and analogies between our representations, and combines these into reflex concepts, or knowledge (*ἐπιστήμη*). Neither spontaneous nor reflex concepts are, however, innate; spontaneity does not imply innateness.

3. As, therefore, all our knowledge arises from sense-perception, the value to be attached to knowledge depends on the value to be attached to sense-perception. Consequently, the Stoics decided that *apprehension* (*κατάληψις*) is the *criterion of truth*. That is true which is apprehended to be true, and it is apprehended to be true when it is represented in the mind with such force, clearness, and energy of conviction that the truth of the representation cannot be denied.¹ The saying attributed to Zeno by Cicero² that *Perception* is like the fingers extended, that *Assent* is like the half-closed hand, that *Apprehension* is like the hand fully closed, and that *Knowledge* (*Scientia*) is like the closed hand firmly grasped by the other hand, would seem to attribute to knowledge a superiority over sense-perception. On closer examination, however, it is seen that the difference is only a difference of degree.³

4. The question, *What is the value of concepts?* was answered by the Stoics in accordance with nominalistic principles borrowed from Antisthenes, who, in opposition to Plato, taught that no universality exists outside the mind, the individual alone being real.⁴

5. In their *classification of concepts* the Stoics reduced the ten Aristotelian categories to four: (1) *substance* (*ὑποκείμενον*), (2) *essential quality* (*τὸ ποιόν*), (3) *accidental quality* (*πὺς ἔχον*),

¹ Sext., *Mathem.*, VII, 244.

² Cf. Ritter and Preller, *op. cit.*, pp. 399 ff.

³ *Acad.*, II, 47.

⁴ *Placita*, IV, 11; Diels, *op. cit.*, p. 400.

and (4) *relation* (πρὸς τὴν πῶς ἔχου).¹ This enumeration, as will be readily perceived, does not retain the Aristotelian distinction between predicables and categories. All the Stoic categories, except the first, are modes of predication rather than modes of being.

Stoic Physics and Theology. The physics of the Stoa is a system of materialistic monism, while the theology of the Stoa may be described as a compromise between theism and pantheism.

The Stoics maintained that *the material alone is real*. They would not admit, for example, that the soul, or virtue, is real except in so far as it is material. God Himself they believed to be material. Above all the categories, therefore, they would place not *ὄν, Being*, but *τὸ, something*, a transcendental notion including not-Being as well as Being, the incorporeal as well as the corporeal. Thus did they identify the incorporeal with the unreal, and include all real being under the generic concept of *matter*.²

Consistently with these principles the Stoics teach that all attributes are air currents: emotions, concepts, judgments, virtues, and vices are air currents which either pass into the soul or come out from it.³ In extenuation of this crude materialism, it must be remarked that the Stoics distinguish between a finer and a coarser matter, attributing to the former an active and to the latter a passive character. The air currents are in substance material; in function, however, they are active, and may be said to play a rôle similar to that which the form plays in Aristotelian philosophy.⁴

¹ For authorities, cf. Ritter and Preller, *op. cit.*, p. 407. ² Cf. Seneca, *Ep.* 58.

³ For references, cf. Zeller, *Stoics*, etc., p. 127, n.; cf. also Ritter and Preller, *op. cit.*, p. 408, note *c*.

⁴ Cf. Ritter, *History of Ancient Philosophy*, trans. by Morrison (Oxford, 1838), Vol. III, p. 513; also Benn, *The Greek Philosophers*, Vol. II, p. 13. The latter says: "Virtues and vices were, according to the Stoics, so many gaseous currents by which the soul is penetrated and shaped — a materialistic rendering of Plato's theory that qualities are distinct and independent substances."

Everything, therefore, is material: the common distinction between corporeal and incorporeal is merely a distinction between coarser and finer matter. We may, indeed, distinguish two principles, or sources, of reality, — matter and force, — but we shall find that in ultimate analysis force, too, is material.

God is, at once, the Author of the universe and its Soul, — the *immanent principle* of its life; for every kind of action ultimately proceeds from one source, which, whether it resides in the heavens or in the sun or in the center of the world (on this point the Stoics were not agreed), diffuses itself throughout every part of the universe, as the cause of heat and growth and life and motion.

God is at one time described as *Fire, Ether, Air, Atmospheric Current* (πνεῦμα); at another time as *Soul, Mind, Reason-containing-the-germs-of-all-things* (λόγος σπερματικός); while sometimes both styles of phraseology are combined, and He is called the *Fiery Reason of the World, Mind in Matter, Reasonable Πνεῦμα*. The language of compromise is never wholly consistent, and the Stoic theology is an attempt to *compromise between theism and pantheism*. It is, however, certain that the Stoics conceived God to be something material; for in their explanation of the presence of God in the universe they assume that the universal intermingling (κρᾶσις δι' ὅλων) implies the impenetrability of matter, so that even when they call Him Mind, Law, Providence, Destiny, they understand by these terms something corporeal.¹

God and the world are the same reality, although there exists a relative difference between God, or reality regarded as a whole, and the world, or reality considered in some one or other of its aspects. This *pantheism* is the central doctrine of the Stoic physics; indeed, it may be said to be the inspiring thought which justified to the Stoic mind the study of natural phenomena. For the Stoics, as has been said, looked upon philosophy

¹ Cf. Cicero, *De Nat. Deorum*, II, 7 ff.; *ibid.*, I, 14.

as primarily a matter of practical import, and studied physics only in order to find a basis for their ethical speculations. Such a basis they found in the doctrine of pantheism. This doctrine may, therefore, be said to have been their religion as well as their philosophy. Accordingly, they criticised the popular beliefs of their time, being careful, however, to admit whatever elements of truth they found in polytheistic religion, and making free use of allegory as a means of bridging over the chasm between polytheism and pantheism.¹

We may, therefore, speak of the world as the *body*, and of the Deity as the *soul* of the universe, if we are careful to bear in mind that the distinction is merely a relative one. The *world arose* in the following manner. The primal fire was condensed into air and water; water in turn was condensed into earth. The derived elements are constantly tending to return by rarefaction to the primal fire;² but no sooner will this destruction by conflagration have taken place than the primal fire will issue forth in another series of condensations, thus beginning another cosmic period, which will end like its predecessor in conflagration. Here the influence of Heraclitus is apparent.

The Deity, regarded as the origin of these processes of condensation and returning rarefaction,—the primal fire,—is *λόγος σπερματικός*; regarded as the ruling or guiding principle of these processes, He is *Providence* (*πρόνοια*) and *Destiny* (*είμαρμένη*). For all things come forth from the primal fire according to law, and all the subsequent changes in the world, all the events of human history, take place according to the necessary sequence of cause and effect. When we think of the order and intelligent arrangement of the divine government, we name the Divine Ruler *Providence*; when we think of the necessary dependence of effect on cause, we name Him *Destiny* or *Fate*.³ According to the Stoic conception, Providence is

¹ Cicero, *De Nat. Deorum*, III, 24 ff. ² Stob., *Ecl.*, I, 444; Diels, *op. cit.*, p. 465.

³ Diog. Laer., VII, 149.

directed immediately to the processes of the universe in general and only mediately to the individual and his actions.

In support of their doctrine of Providence, the Stoics appeal to the *universal consent of mankind*,¹ being, apparently, the first to use this argument.

The human soul is material. This not only follows from the general principles of Stoic philosophy but is also expressly taught by the Stoics and proved with the aid of many arguments.² The soul is conceived as fiery breath (*πνεῦμα*) diffused throughout the body; in fact, the relation of the soul to the body is the same as that of the Deity to the world. It is, in a special sense, part of the Deity, partaking more and more of the nature of the Deity according as we allow greater play to the divine, or reasonable, in us.³ Now, it is precisely on account of this special proximity of the soul to the divine that it cannot escape the *necessity which divine law imposes* on all things. The soul is in no sense free, unless it be said to be free because the necessity by which it is ruled comes from its own nature rather than from anything external to it. Merit and reward follow the action which, although it *must* be performed, is performed voluntarily, that is, with perfect acquiescence in the rule of divine destiny. "Volentem fata ducunt; nolentem trahunt."⁴

The Stoic idea of the soul is as incompatible with *immortality* as it is with the freedom of the will. The soul, being material, is destined to destruction. The time, however, at which the soul is to be dissolved into the primal fire is not the moment of death, but the end of the cosmic period, when all matter is to be destroyed by conflagration. The Stoics were divided as to whether the souls of all men, or only those of the wise, will last until that time.⁵ Seneca's reference⁶ to death as the birth of a future life, and his description of the peace that awaits the

¹ Stob., *Ecl.*, I, 100.

² Diog. Laer., VII, 157.

³ Seneca, *Ep.* 31.

⁴ Cf. Cicero, *De Fato*, XVIII.

⁵ Diog. Laer., VII, 156.

⁶ *Ep.* 102.

soul beyond the grave, suggestive as they are of Platonic and, possibly, Christian influences, contain nothing that is at variance with what the Stoics taught about the destiny of the human soul.

Stoic Ethics. The Stoics regarded ethics as the "divine part" of philosophy, from which, as from a center, all their logical and physical inquiries radiate. Questions of logic and physics were of interest merely in so far as their solution threw light on the paramount problem of philosophy, the problem of human destiny and human happiness. Thus, at the very outset of the ethical inquiry concerning *happiness*, the Stoics applied the most characteristic of their physical doctrines, — that everything in the world of reality obeys and must obey inevitable law. Man, it is true, is endowed with reason, and is thereby enabled to know the law which he obeys; he is none the less obliged to obey it. Nay, more, since he is in a special sense divine, he is under greater necessity to obey than other manifestations of the Divine. The *supreme canon of conduct* is, therefore, to live conformably to nature (*ὁμολογουμένως τῇ φύσει ζῆν*), or, as Zeno is said to have formulated the maxim, to live a consistent life, *ὁμολογουμένως ζῆν*. This is man's happiness (*εὐδαιμονία*), his chief good (*ἀγαθόν*), the end of his existence (*τέλος*).¹

The highest purpose of human life is not, therefore, contemplation, but action in accordance with the laws of universal nature, with the will of the Deity. A hint of this purpose is contained in the instinct of self-preservation which is the primary impulse in every being.

Action in accordance with nature's laws is *virtue*, which Cicero translates *recta ratio*. Virtue is not merely a good; it is *the only good*. Consequently, riches and pleasure and health and honors are not goods in any true sense of the word; and the Stoics persistently combated the teaching of Plato and Aristotle, who considered that the external goods of life are worthy of

¹ Cf. Cicero, *De Finibus*, III, 5; Diog. Laer., VII, 88.

being desired, although they are subservient to the chief good, which is virtue. Stoicism was still more decided in its opposition to the Hedonist doctrine which made virtue itself to be a good subordinate to pleasure.¹

If, then, *virtue* is the only good, it *must be sought for its own sake*; it contains all the conditions of happiness; virtue is virtue's own reward.² Everything else is indifferent (*ἀδιάφορον*).

The Stoics adhered to the Socratic doctrine that virtue is one, and yet, since virtue, while one, may have a plurality of objects, they considered that there are different manifestations of virtue, such as *prudence, courage, temperance, and justice* (which Plato regarded as four kinds of virtue), and *patience, magnanimity*, etc., which may be regarded as derivations from one or other of the cardinal virtues.³ Accordingly, a man who is prudent must of necessity be courageous; for *he who possesses one virtue must possess all*.⁴ Now, he who has a right appreciation of good and evil, and who consequently intends to do good, is virtuous. From which it follows that no act is in itself praiseworthy or reprehensible; the morality of the act is determined by the disposition: "Non quid fiat, aut quid detur refert, sed qua mente."⁵

Vice, the opposite of virtue, consists in living out of harmony with the laws of nature. Like virtue, it is essentially one. He who is guilty of one vice is guilty of all; there is no distinction of degree in vice. ("Omnia peccata paria.")

The Stoics, however, although they seemed to identify moral excellence with intellectual or rational insight, and spoke of the virtuous man as the wise man, recognized that man is not wholly rational. From his irrational nature spring the *emotions* (*πάθη*). The emotions — *perturbationes*, as Cicero calls them — are movements of the mind contrary to reason.⁶ Now, there is

¹ Diog. Laer., VII, 30; Marcus Aurelius, IX, 16.

² Diog. Laer., VII, 102; Seneca, *Ep.* 85.

³ Stob., *Ecl.*, II, 104.

⁴ Cicero, *Paradoxa*, 3, 1.

⁵ Seneca, *De Beneficiis*, VI, 6.

⁶ Diog. Laer., VII, 110.

a desire (*ὁρμή*) which is according to law and reason, and this is the natural impulse towards what is good. The desire, on the contrary, which is according to emotion is intrinsically unreasonable and therefore bad; for all emotions are contrary to reason. It follows that the wise man should aim at eradicating all his emotions; he should strive to become absolutely emotionless.¹ This doctrine of *apathy* is one of the most characteristic of the doctrines of the Stoa.²

In their application of these ethical principles the Stoics developed a vast number of *paradoxes referring to the wise man*, that is, to the ideal Stoic philosopher. He alone is free, beautiful, rich, and happy. He alone knows how to govern as well as to obey. He is the orator, the poet, the prophet. The rest of the world is mad; the majority of men pass their lives in wickedness, slaves to custom, to pleasure, and to a multitude of desires. The wise man alone is indifferent to pain; for him death has no terrors, and when he is called upon to decide between death and dishonor he is true to his Stoic teaching if he prefers the former. Suicide, therefore, is sometimes a duty; it is always justified if impending misfortune is such as seriously to threaten peace of mind and tranquillity of soul. The wise man is independent of all ties of blood and kinship. He is at home everywhere. He is a citizen of the world, or, as Epictetus says,³ he is a child of God and all men are his brethren.

Historical Position. Stoic philosophy, by reason of its systematic development, approaches more closely to the comprehensiveness of the Platonic and Aristotelian systems than does any other philosophy of this third period. Taking up the best principles of the Cynic morality, it advanced far beyond the Cynic philosophy, owing to the larger part which it assigned

¹ Diog. Laer., VII, 117.

² For comparison of the Christian and the Stoic systems of morality, cf. Talamo, *Le origini del Cristianesimo e il pensiero stoico* (terza ed., Roma, 1902).

³ *Dissertations*, I, 13, 3.

to mental culture in its scheme of life, and also to the broader and more systematic basis of logic and physics on which it built its ethical teaching. Nevertheless, Stoicism is not free from the dominant vice of the age to which it belonged. It is a *one-sided development of philosophy*. It subordinates the theoretical to the practical. In its theory of knowledge it is sensistic; in its physics it is materialistic and pantheistic; in the development of its moral principles it subordinates the individual to universal law, stamping out individual desire, and advocating the merging of domestic and political instincts in a far-off dream of the fellowship of cosmopolitan philosophers. It lacks that comprehensive sweep of contemplation which, in the golden age of Greek philosophy, set the theoretical by the side of the practical, placed the study of nature on a footing which gave it a value of its own, distinguished, without separating, matter and mind, and in ethics gave due importance to the individual emotions and to the social instincts as well as to the immutable moral law. This disintegration of the universal philosophical view, and the consequent isolation of separate aspects of speculative and practical problems, which is first seen in Stoicism, goes on increasing in the systems which come after the philosophy of the Stoa.

Of all the defects of Stoicism, that which contributed most to the downfall and dissolution of the school was the doctrine that *the wise man is emancipated from all moral law*. This doctrine is not the only tenet of the Stoics which recalls the philosophy of the Orient rather than that of Greece. The identity of God and the world, the emanation of the soul, the final reabsorption of all things in God, — these and similar doctrines are peculiar to the Oriental form of speculation. We must remember that Zeno of Cyprus was not more than half Greek, and although his mental training and the logical derivation of his philosophy were entirely Greek, there was in him enough of the Oriental temperament to infuse into his philosophy a spirit more in accordance with the quietism of the East than with the Grecian

sense of artistic completeness. This *quietism*, together with the exorbitant claims set up on behalf of the wise man, finally brought Stoicism down to so low a level of moral aims that it was scarcely to be distinguished from Epicureanism.

CHAPTER XIV

THE EPICUREANS

Sources. Of the voluminous writings of Epicurus only a few fragments have come down to us, and these are for the most part unimportant. For the history of the school the most important *primary source* is Lucretius' poem *De Rerum Natura*. As *secondary sources* we have the works of Cicero, Plutarch, Diogenes Laertius, and the Aristotelian commentators.

History of the Epicurean School.¹ Epicurus was born at Samos in the year 341 or 342 B.C. His father, Neocles, was, Strabo tells us, a school teacher. According to the tradition of the Epicurean school, Epicurus was a self-taught philosopher, and this is confirmed by his very superficial acquaintance with the philosophical systems of his predecessors. Still, he must have had some instruction in philosophy, for Pamphilus and Nausiphanes are mentioned as having been his teachers; Epicurus, however, would not acknowledge his debt to them, boasting that he had begun his self-instruction at the age of fourteen, having been driven to rely on his own powers of thought by the inability of his teacher to explain what was meant by the Chaos of Hesiod. He first taught at Mitylene, afterwards at Lampsacus, and finally at Athens, where he established his school in a garden, thereby giving occasion for the name by which his followers were known, οἱ ἀπὸ τῶν κήπων. Here he taught until his death, which took place in 270 B.C.

The most celebrated of the disciples of Epicurus were Metrodorus (born 330 B.C.), Hermarchus (who succeeded Epicurus as president of the school and was succeeded by Polystratus), Dionysius, and Basilides. Towards the end of the second century B.C. the school was represented at Athens by Apollodorus, Zeno of Sidon, and Phædrus.

Amalfinius (about 150 B.C.) seems to have been the first to make known the doctrines of Epicurus to the Romans. Later on we hear of a

¹ For biographical data, cf. Ritter and Preller, *op. cit.*, pp. 373 ff.

Syro, or Sciro, who taught Epicurean philosophy at Rome; but it is **Lucretius** (Titus Lucretius Carus, 95-51 B.C.) who, in his poem *De Rerum Natura*, gives us the first Latin contribution to Epicurean literature.

Although the school of Epicurus is said to have been distinguished by its cheerful tone, it is certain that it indulged in much abusive criticism, for the Epicureans were known throughout antiquity as leaders in the art of calumny. Everything, therefore, which the Epicureans say about the systems and the philosophers of pre-Socratic and Socratic times must have corroboration from other sources before it can be accepted. Epicurus himself set the example in misrepresentation, when he gave expression to his contempt for his teachers and predecessors, while from his own followers he exacted every outward mark of respect, even insisting on their committing to memory certain brief formulas (*κύρια δόξαι*) which contained the pith of his teaching.¹ Hence it is that the Epicurean philosophy adhered so closely to the form which it first received from the teaching of Epicurus.

EPICUREAN PHILOSOPHY

Epicurean Notion of Philosophy. Having defined philosophy as *the art of making life happy*,² and having laid down the principle that there should be no deviation from the *κύρια δόξαι*, Epicurus subordinated speculation to the practical aspects of philosophy and effectively discouraged all independence of thought on the part of his disciples. It is well known that he despised learning and culture. The only logical problem to which he gave even cursory attention was the problem of knowledge. He attached greater value to the study of nature, but only because he considered that a knowledge of natural causes may free the mind from a fear of the gods and in this way contribute to human happiness.³ In the philosophy of Epicurus, therefore, *ethics*, or the inquiry into the nature and conditions of happiness, is the paramount problem, to which *logic* and the *study of nature* are merely the preliminaries.

Epicurean Logic. This portion of Epicurean philosophy was styled *canonic*, because it consists merely of a system of rules,

¹ Cicero, *De Fin.*, II, 7. ² Sext., *Mathem.*, XI, 169. ³ Cicero, *De Fin.*, I, 7.

or canons, referring to the acquisition of knowledge and the ascertainment of truth. It passes by the questions of formal logic and is in reality an epistemology.

In their *theory of knowledge* the Epicureans favor a more pronounced sensism than that of the Stoics. They maintain that, while in practice the standard of truth is pleasure and pain, in theory the ultimate test of all knowledge is *sensation* (αἴσθησις). Sensation, as such, is always to be relied upon; error lies not in the sensation itself, but rather in our judgment concerning sensation. Several sensations amalgamated in a general picture result in a *notion* (πρόληψις). The notion, however, as regards objective value, is not superior to the sensations from which it arises.¹ From notions arises *opinion*, or *thought* (δόξα, ὑπόληψις), which likewise depends on sensation for its truth.

How, then, does sensation take place? In their answer to this question the Epicureans content themselves with reproducing the doctrine of Democritus, according to whom sensation takes place by means of certain *effluxes* (εἶδωλα, ἀπορροαί), which, detaching themselves from external objects and passing through the pores of the air, enter the senses.² If, therefore, sensation is sometimes apparently at fault, the real source of the deception lies in the objective distortion or mutilation of the efflux-images. Thus, for example, the image of a man and the image of a horse, combined as it were by accident, give rise to the impression of a centaur.³ Our impression, even in cases of this kind, corresponds to the image, and consequently the sensation is true. And if, as sometimes happens, the same object affects several persons differently, the cause of the diversity of impression is the plurality of images; the sensation in each case is true because it corresponds to the image which produces it.⁴

¹ Diog. Laer., X, 33.

² Lucr., IV, 26. References are to the poem *De Rerum Natura*.

³ *Op. cit.*, IV, 730.

⁴ Cf. Zeller, *op. cit.*, p. 431.

Epicurean Physics. The physical doctrines of the Epicureans receive their tone and character from the purpose which the Epicureans always had in mind throughout their investigations of nature,—*to free men from the fear of the gods*. To this aim the Epicureans subordinated their physical inquiries, and as they cared little whether their explanation was accurate or inaccurate, complete or incomplete, they left matters of detail to be settled by individuals according to individual choice, insisting, however, in their general explanation of natural phenomena, on the exclusion of any cause that was not a natural cause.

Deliberately rejecting the Socratic philosophy of nature and turning to the pre-Socratic systems of philosophy, Epicurus recognized that the philosophy which was most naturalistic in its explanations and waged most persistent warfare on final causes, was that of Democritus. As his theory of nature, therefore, he adopted the physics of Democritus, modifying it, as we shall see, in one important respect. Thus he accepted without modification the *atomism* of Democritus as well as the Democritean idea of a *vacuum*. Nothing exists except atoms and void : mind as moving cause is a superfluous postulate :

Ergo, praeter inane et corpora, tertia per se
Nulla potest rerum in numero natura relinqui.¹

The only point on which Democritus and Epicurus differ is in reference to the *primal motion of atoms*. Democritus maintained that the atoms, falling through empty space, moved with different velocities on account of their difference in weight. This, Aristotle pointed out, is impossible. Epicurus, acknowledging the justice of Aristotle's criticism, sought to account for the collision of the falling atoms by postulating on the part of the atoms a *self-determining power* by means of which some

¹ Lucr., I, 445.

of them swerved slightly from the vertical line and thus¹ caused a circular or rotatory motion.

In his account of *the origin of life* Epicurus accepted the theory of Empedocles, who held that all sorts of deformed and monstrous creatures first sprang from the earth, those alone surviving which were fit to support and protect themselves and to propagate their kind.

The Epicurean account of *human society* is well known. Lucretius² taught that the men of olden times were as strong and as savage as beasts; that the primitive condition of the race was one of warfare; and that civil society was formed as a protection against anarchy and the absolute power of kings.

Similarly, *religion*, according to the Epicureans, was of natural growth. *Fear* is the basis of religion.³ *Ignorance*, too, is a factor in the genesis of the religious instinct. It was owing to ignorance and fear that men attributed natural portents to the intervention of supernatural powers and sought to explain the regularity of the motion of the heavenly bodies by referring it to the agency of Providence. Nevertheless, Epicurus did not wholly abandon belief in the gods. The gods, he said, exist because they have appeared to men and left on the minds of men representative images (*προλήψεις*).⁴ They are immortal; they enjoy perfect happiness; formed of the finest atoms, they dwell in the uppermost parts of the universe, in the spaces between the stars. The popular notion, however, that the gods take an interest in human affairs is erroneous, because an interest in the affairs of men would be inconsistent with the perfect happiness which the gods enjoy.⁵

The *human soul* is, like the gods, *composed of the finer kind of atoms*. It is a more subtle kind of body, resembling air and fire.⁶ More accurately, it is composed of air, fire, vapor, and

¹ Lucr., II, 216.

² V, 925 ff.

³ Lucr., III, 14; I, 62.

⁴ Cf. Cicero, *De Nat. Deorum*, I, 16.

⁵ Diog. Laer., X, 123.

⁶ *Op. cit.*, X, 63.

a fourth element, which is nameless. This last constitutes the rational part (λογικόν) of the soul, which is seated in the breast, while air, fire, and vapor constitute the irrational part, which is scattered throughout the remainder of the body. Lucretius calls the rational part *animus*, or *mens*, and the irrational part *anima*.¹

According to the Stoics, it is the soul which holds the body together; according to the Epicureans, it is the body which shelters the atoms of the soul, so that, when the protection afforded by the body ceases, as it does at the moment of death, the soul atoms are instantly scattered, owing to their extreme lightness.² In this way Epicurus, keeping in mind the chief aim of all his physical inquiries, sought to rob death of its terrors by teaching that *there is no future life*. "Tota res ficta est pueriliter," as Cicero exclaims.

Epicurus asserted the *freedom of the will*. He denied the existence of fate, but in his own analysis of human action he was obliged to substitute chance for fate. Despite his doctrine of freedom, he was forced to maintain that there is no truth in disjunctive propositions referring to the future.³

Epicurean Ethics. The Epicurean *canonic* and the general views which the Epicureans maintained in matters of physical science led inevitably to the conclusion that *the only unconditional good is pleasure*, a conclusion which is the basis of Epicurean ethics. The ethical system of Epicurus is simply a modified form of the Hedonism of Aristippus and the other Cyrenaics. When, however, Epicurus comes to define pleasure, he does not, like Aristippus, define it as a gentle motion: considering rather its negative aspect, he describes it as the absence of pain. He does not indeed omit the positive aspect; he merely insists that the negative aspect, repose of mind (*ἀταραξία*), is essential, while the gentle motion which constitutes positive

¹ Cf. III, 94 ff.

² Lucr., III, 417 ff.

³ Cf. Cicero, *De Nat. Deorum*, I, 25.

pleasure is secondary and accidental.¹ Unsatisfied-desire is pain, and pain is destructive of mental repose; for this reason, and for this reason alone, should the desires be satisfied, and it is only in this way that positive pleasure becomes part of the highest good.²

The difference between the Epicureans and the Cyrenaics is furthermore apparent in the Epicurean doctrine of the *hierarchy of pleasures*. Highest of all pleasures are those of the mind, namely, knowledge and intelligence, which free the soul from prejudice and fear, and contribute to its repose. For this reason the wise man should not place his hope of happiness in the pleasures of sense, but should rise to the plane of intellectual enjoyment. Here, however, Epicurus was inconsistent; he could not logically maintain a distinction between sense and intellect. Indeed, Diogenes³ preserves a saying of Epicurus to the effect that there is no good apart from the pleasures of the senses, and Plutarch and others represent Metrodorus as maintaining that everything good has reference to the stomach.⁴

In their application of the doctrine of pleasure the Epicureans recognize that each man is, in a certain sense, his own legislator. It is for him to determine what is useful or pleasant and what is harmful or painful. Hence the principle of *moderation*: *Restrain your needs and desires within the measure in which you will be able to satisfy them*. And, while no kind of pleasure is evil in itself, the wise man will avoid those pleasures which disturb his peace of mind and which, therefore, entail pain.⁵

Virtue has for the Epicureans a merely relative value. It is not good or praiseworthy in itself, but only so far as it is useful in securing that painlessness which is the happiness of life. The virtuous man secures the maximum of pleasure and

¹ Diog. Laer., X, 136.

² X, 6.

³ Seneca, *Ep.* 66.

⁴ Cf. Ritter and Preller, *op. cit.*, 387.

⁵ Diog. Laer., X, 130; cf. Cicero, *Tusc.*, V, 31.

the minimum of pain ; *temperance* teaches him to avoid excess, and *courage* enables him to forego a pleasure or endure a pain for the sake of greater pleasure or less pain in the future. Less successful even than these attempts at finding a rational basis for courage and temperance is the Epicurean attempt at analyzing the virtue of *justice*; for justice in the Epicurean philosophy is based on the *social compact* into which primitive man entered as a means of self-defense and self-preservation. Cicero complains that the ethics of the Epicureans leaves no place for the sentiment of honor; a more serious fault is its failure to supply a rational basis for the virtue of justice.

The claims which the Epicureans advanced on behalf of the *wise man* are similar to those advanced by the Stoics. The wise man alone is master of his desires; he is unerring in his convictions; he is happy in every circumstance and condition of life; and although he is not, as was the Stoic sage, wholly unemotional, still he holds his emotions in perfect control. Later, however, this ideal gradually degenerated, and despite the example of moderation set by Epicurus and his early followers, the wise man of Epicurean tradition became the model of the careless man of the world, with whom it is impossible to associate earnestness of moral striving.

Historical Position. The Stoic and the Epicurean schools, the two most important schools of the period, both sprang up and developed under the influence of the same external conditions. The internal principle of their development was, however, different. *The Stoics were fatalists; the Epicureans were casualists.* This difference in their conception of nature led to the difference in their view of practical life which is so apparent in their ethical systems. Yet there were points, theoretical as well as ethical, in which the two schools approached very close to each other. Both were materialistic in their physical systems and sensualistic in their theories of knowledge; both were illogical in their development of the idea of duty, although,

as Zeller points out, the charge of inconsistency is urged with less justice against the Epicureans than against the Stoics. The Epicureans defined philosophy as the art of making life happy, and for them happiness was primarily a matter of feeling rather than of knowledge, while the Stoics defined happiness as consisting in a life led in harmony with nature. For the Stoic, therefore, the study of nature and the adoption of a consistent theory of nature were of greater importance than they were for the Epicurean.

The physics of the Epicureans differs, as has been said, from the physics of Democritus in regard to the doctrine of the swerving motion of the atoms, — an admission which destroys the consistency of Democritus' theory. This theory was at least not self-contradictory: the Epicurean theory is a mixture of dynamism and mechanism which cannot stand a moment's serious investigation.

The ethics of the Epicurean school is simply the Hedonism of Aristippus refined under a broader idea of culture and a more enlightened concept of Socratic Eudemonism. In spite of Socratic influence, the Epicurean ethics is not, in the strict sense of the word, a system of morality at all. It contains no principles of morality; it reduces right and wrong to a matter of individual feeling, substituting for *good* and *evil* the categories *pleasant* and *painful*.

CHAPTER XV

THE SCEPTICS

Sources. Pyrrho, the chief Sceptic of this period, left no writings. Of the writings of his earlier followers very few fragments have come down to us. We are obliged, therefore, to rely on *secondary sources*, such as *Diogenes Laertius*, *Aristocles* (quoted by Eusebius), and the *Later Sceptics*.¹

The Stoics and Epicureans laid down certain theoretical principles from which they deduced canons of conduct, always keeping in view the practical aim of philosophy, to make men happy. The Sceptics agreed with the Stoics and Epicureans in referring philosophy primarily to conduct and the pursuit of happiness, but, instead of laying down theoretical principles as the Stoics and Epicureans had done, they taught that the first step to happiness is to forego all theoretical inquiry and to disclaim all certainty of knowledge.

The principal Sceptics are: (1) **Pyrrho**, (2) *the Platonists of the Middle Academy*, (3) *Later Sceptics*, including *Ænesidemus*.

PYRRHO

Life. Pyrrho of Elis was a contemporary of Aristotle. Very little is known about his life. It is probable that he died about the year 270 B.C. Among his disciples **Timon of Phlius**, surnamed the *sillographer*, is best known. Timon composed satirical poems (*σίλλοι*) in which he attacked the dogmatists, following in this the example of his teacher, who declared that Democritus alone deserved the name of philosopher, and that all the rest, Plato and Aristotle included, were mere *Sophists*.

DOCTRINES

In accounting for Pyrrho's Scepticism it is safe to add to the influence which Democritus may have exercised on his mind

¹ For biographical data, cf. Suidas, *Lexikon* (ed. Bernhardt, 2 vols., Halle, 1853); cf. Migne, *Patrologia Græca*, Vol. CXVII, col. 1194.

the influence of the Megarian spirit of criticism which must have prevailed in Pyrrho's native city.

All we know about the teaching of Pyrrho may be reduced to the following propositions: (1) In themselves, real things are neither beautiful nor ugly, neither large nor small. We have as little right to say that they are the one as we have to say that they are the other. Hence the famous *οὐδὲν μᾶλλον*.¹ (2) Real things are, therefore, inaccessible to human knowledge, and he is wise who, recognizing the futility of inquiry, abstains from judging. This attitude of mind was called *ἐποχή, ἀφασία*.² (3) From this withholding of judgment arises the state of *imperturbability* (*ἀταραξία*) in which human happiness consists.³

In this account of Pyrrhonism no attempt has been made to separate the doctrines of Pyrrho from those of Timon. Pyrrho taught orally, and the fact of his having left no writings accounts for the freedom with which writers attribute to him the principles and tenets of his followers.

THE MIDDLE ACADEMY

Arcesilaus and **Carneades**, departing from the tradition of the Platonic school, of which they were the official representatives, lent their aid to the Sceptical movement by seeking to establish on rational and empirical grounds the thesis that it is impossible to arrive at certitude.⁴ The Scepticism of the Middle Academy very quickly gave way before Eclecticism.

THE LATER SCEPTICS

Under this title are included **Ænesidemus** and others who were for the most part physicians, and who from sensualistic premises

¹ Cf. Diog. Laer., IX, 61.

² *Op. cit.*, IX, 103.

³ Aristocles, quoted by Eusebius, *Præparatio Evangelica*, XIV, 18, *apud* Migne, *Patr. Græca*, Vol. XXI, coll. 1216 ff.

⁴ Cf. p. 123.

deduced a system of Scepticism which was more radical than the idealistic Scepticism or the probabilism of the Academy.

Ænesidemus of Cnossus in Crete taught at Alexandria about the beginning of the Christian era. According to Ritter and Preller,¹ he flourished between the years 80 and 50 B.C. Diogenes² alludes to a work of Ænesidemus in which by means of ten *tropes* (τρόποι) he strove to show that contradictory predicates may be affirmed of one and the same subject, and that, consequently, certain knowledge is impossible. These tropes are a fairly complete enumeration of the arguments of the Sceptics and furnished, directly or indirectly, material to more than one advocate of the relativity of knowledge in subsequent times.

According to Sextus Empiricus,³ Ænesidemus subjected the notion of *cause* to special analysis, and pronounced it to be self-contradictory. A cause, he argued, either precedes the effect, or is synchronous with it, or is subsequent to it. Now, it cannot precede the effect; if it did, it would be a cause before it was a cause. It cannot be synchronous with the effect, for in that case cause and effect would be interchangeable; there would be no reason why one rather than the other should be called the product. Finally, the hypothesis that the cause is subsequent to the effect is manifestly absurd. In this way did Ænesidemus conclude, sophistically, that *the notion of cause is utterly devoid of meaning*.

Ænesidemus, however, did not regard Scepticism as a system, but only as an introduction (ἀγωγή) to a system of philosophy.

Agrippa, who lived about a century after Ænesidemus, reduced the *tropes* to five, and argued that knowledge is impossible because, the major premise of the syllogism being itself a conclusion, syllogistic reasoning is a *regressus in infinitum*.

Sextus Empiricus, who is the most important of the later Sceptics, lived at Alexandria about the year A.D. 300. In his work *Against the Mathematicians*, and in his treatise known as

¹ *Op. cit.*, p. 570.

² IX, 106.

³ *Mathem.*, IX, 220.

Pyrrhonic Hypotyposes, he subjects to critical examination the dogmatism not only of the great constructive systems of theoretical and practical philosophy but also of arithmetic and geometry. He maintains that no science is certain, or rather that the true Sceptic should refrain from any absolute judgment whatever.

Historical Position. The history of Greek Scepticism exhibits an interesting phase of the practical idea which dominated the philosophy of Greece during the third period. Like the Stoics and Epicureans, the Sceptics were animated with the desire to find in philosophy a refuge from the disheartening conditions of the times in which they lived; but, unlike their dogmatizing contemporaries, they believed that the first step towards securing happiness is the abdication of all claim to the attainment of scientific knowledge.

CHAPTER XVI

THE ECLECTICS¹

The Eclecticism of this third period in the history of Greek philosophy is merely another aspect of the Scepticism which resulted from the exhaustion of speculative thought. The conflict of parties and schools led to the Sceptic despair of attaining scientific knowledge; the same cause led to the Eclectic attempt at finding in a looser concept of system a common speculative basis on which to erect a philosophy of conduct. Eclecticism relinquished the task of constructing a speculative system in the stricter sense of the word, and adopted what may be called a working hypothesis, falling back on common consciousness or uncriticised immediate knowledge as the final test of philosophic truth. The Eclectic tendency penetrated all the schools, everywhere dissolving the spirit of system which, under scholarchs of inferior ability, had already begun to lose its primitive

¹ For biographical data, cf. Suidas, *op. cit.*

power of cohesion. Accordingly, among the Stoics and Epicureans as well as among the followers of Plato and Aristotle, we find all through the century and a half before Christ as well as during the first three centuries of the Christian era evidences of the Eclectic spirit preparing the way for the more comprehensive syncretic efforts of the school of Alexandria.

Among the *Stoics* the principal Eclectics were **Boëthius**, who borrowed from Peripatetic sources, and **Panætius** and **Posidonius**. The latter two belonged to the second century before Christ and strove, under the influence of Platonic and Aristotelian ideas, to moderate the rigor of Stoic morality. Later, in the second century after Christ, **Demetrius** and **Demonax** exhibited a tendency to return to the ultra-Stoic rigor of Cynicism.

Among the *Epicureans* **Asclepiades** of Bithynia modified the teaching of his school by maintaining the indefinite divisibility of atoms.

The *Platonic Academy* shows the influence of the Eclectic spirit in the teachings of **Philo** of Larissa and of **Antiochus** of Ascalon,¹ as well as of **Eudorus** of Alexandria, who was a contemporary of Augustus.

Mention has already been made² of **Andronicus** of Rhodes, **Alexander** of Aphrodisias, and **Galen**, who were Eclectics of the *Peripatetic* school.

CHAPTER XVII

THE SCIENTIFIC MOVEMENT

As an inevitable result of the Sceptical and Eclectic tendencies of the age, the natural and mathematical sciences gradually broke loose from philosophy. They flourished especially in the Greek islands of the Mediterranean and in Egypt, because there they were free from the disheartening influences which at Athens

¹ Cf. p. 124.

² Cf. p. 159.

and elsewhere in Hellas led to the dissolution of classical culture and classical philosophy.

In Sicily, where the Pythagorean tradition was still unbroken, **Hicetas** and **Archimedes** taught, as early as the third century before Christ, a system of astronomy which was far superior to the astronomical doctrines of Plato and Aristotle.¹ About the same time **Aristarchus** of Samos advanced the hypothesis that the earth moves round the sun. This theory was stamped as impious by the Stoics and rejected by Ptolemy himself; it did not succeed in supplanting the old conception until the dawn of modern times, when its truth was demonstrated by Copernicus, Kepler, and Galileo.

At Alexandria there developed under the influence of the Ptolemies a new phase of philosophic thought, the study of which belongs to the history of Greco-Oriental philosophy. Side by side with this new philosophy there grew up a new science, of which **Euclid** (about 300 B.C.) is the chief representative. He wrote the *Elements of Geometry* and treatises on *Harmony*, *Optics*, and *Catoptrics*. **Ptolemy** (*Claudius Ptolemæus*), who lived about the middle of the second century after Christ, belongs also to the Alexandrian school of science. His work, the *Almagest*, or *μεγάλη σύνταξις*, continued to be the authoritative source of astronomical learning until the time of Copernicus.

CHAPTER XVIII

PHILOSOPHY OF THE ROMANS²

The Pythagoreans of Magna Græcia were the first to introduce Greek philosophy into Italy. Pythagorean philosophy, however, never took deep root in Roman soil. Indeed, although Pythagorean speculation flourished in Italy as early as the sixth century,

¹ Cf. Cicero, *Acad.*, XXXIX.

² Cf. Zeller, *Eclectics*, pp. 5 ff.; Ritter and Preller, *op. cit.*, pp. 452 ff.

it was not until the beginning of the second century before Christ that Rome began to feel the power of Greek literature and Greek art, and it was about the same time that the influence of Greek philosophy was first felt. That the Romans did not accept without a struggle this imposition of a foreign culture is evident from the fact that in 161 B.C. residence in Rome was, by a decree of the Senate, forbidden to philosophers and rhetoricians. Later, however, the conquest of Greece and the military expeditions of Pompey, Cæsar, Antony, and Augustus broadened the minds of the Romans, rendered them susceptible to the beauty of Greek literature, and led to the inflow of Greek learning and to the establishment in Rome of the representative teachers of Greek philosophy. Cicero was, therefore, contrasting his own age with the more conservative past when he said: "*Philosophia jacuit usque ad hanc ætatem.*"

In accepting the philosophy of Greece, the Roman spirit asserted its *practical tendency*, selecting what was more easily assimilated, and modifying what it accepted, by imparting to it a more practical character. Thus it was the ethical philosophy of the Epicureans and Stoics and the Eclectic systems of later times, rather than the philosophy of Plato and Aristotle, that thrived when transplanted to Roman soil.

CICERO

Life. Marcus Tullius Cicero is the best known representative of Roman Eclecticism. He was born at Arpinum 106 B.C. and died at Formiæ 43 B.C. He had for teachers Phædrus the Epicurean, Philo of Larissa, representing the New Academy, Diodotus the Stoic, and Antiochus, an exponent of the later Eclecticism of the Academy. In addition to the advantages to be derived from such a training, he possessed a knowledge, widely extended if not always accurate, of the philosophical literature of pre-Socratic and Socratic schools. He did not lay claim to any great independence as a philosopher, being willing, as he tells us, to take credit merely for the art with which he clothed Greek philosophy in Roman dress: "*Verba*

tantum affero, quibus abundo."¹ In this self-appointed task Cicero is not always successful, his account of the doctrines of the pre-Socratic philosophers being especially inaccurate.

Sources. Cicero's principal philosophical works are : *Academica*, or *Quæstiones Academicae*, *Tusculana Disputationes*, *De Finibus*, *De Natura Deorum*, *De Officiis*, *De Divinatione* (unfinished), *De Republica* (of which about a third part was discovered and published in 1822 by Cardinal Mai), *Paradoxa Stoicorum*, *De Senectute*, *De Amicitia*, *De Fato*.

DOCTRINES

General Idea of Philosophy. Cicero describes himself² as a member of the New Academy. His philosophy is, in point of fact, an Eclecticism based on Scepticism. So impressed was he with the war of philosophical systems that he despaired of arriving at certainty and was content to accept probability as the guide of conduct. But whenever he discovered that philosophical schools could be reconciled, he strove to coördinate the common elements into a system loosely connected, as is every system of Eclecticism.

Theory of Knowledge. All our knowledge rests, in ultimate analysis, on immediate certainty, which is variously called *notiones innatæ*, *notiones nobis insitæ*, or, since immediate knowledge is common to all men, *consensus gentium*. In the *Tusculan Disputations*, for example, Cicero speaks of the principles of morality as innate ; "sunt enim ingeniis nostris semina innata virtutum."³ These elements of knowledge are antecedent to all experience. We have, therefore, in Cicero's theory of knowledge, the first explicit expression of the doctrine of *innate ideas*.

Theological Notions. Cicero, in his proof of the existence of God, falls back on the *innate idea of God*, the presence of which in the minds of all men is proved by the universality of the belief in a Supreme Being. He brings forward also the

¹ *Ad Atticum*, XII, 52.

² *Tusc.*, V, 4.

³ *Op. cit.*, III, 1.

teleological argument in its Stoic form, contending that the Epicurean doctrine of chance is as absurd as would be the expectation that the twenty-one letters of the Latin alphabet could, by being poured out at random, produce the *Annals* of Ennius.¹ He attaches great importance to the doctrine of Providence and of the divine government of the universe.

Anthropology. With the belief in God is intimately associated the conviction of the dignity of man. The soul is of supernatural origin: "Animorum nulla in terris origo inveniri potest."² It is different from matter. Still, Cicero does not altogether exclude the Stoic idea of the soul as a firelike substance. He teaches that *the soul is immortal*, having recourse to the Platonic arguments as well as to inner conviction and universal consent. In his incomplete treatise *De Fato* he proves the *freedom of the will* by similar arguments.

Ethics. In this portion of his philosophy Cicero is a follower of the Eclectic Stoics. On the one hand he rejects the Epicurean doctrine that pleasure is the highest good; but when, on the other hand, he adopts the Stoic doctrine of virtue, he is too much of a man of the world not to recognize that the Stoic morality is too exalted or too severe to be applied to everyday life. Accordingly, he modifies the severity of Stoicism by introducing the Platonic and Aristotelian teaching, that honors, wealth, etc., are goods, although subordinate to virtue, which is the chief good.³ He teaches that while virtue is sufficient for *vita beata*, external goods also are necessary for *vita beatissima*, — a distinction borrowed from Antiochus of Ascalon. The morally good (*honestum*) is that which is intrinsically praiseworthy.

Historical Position. Cicero, as has been said, laid no claim to originality as a philosopher. He merely collected and assimilated the philosophical doctrines of the Greeks. He is the truest representative of the Eclecticism of this period.

¹ *De Nat. Deorum*, II, 37.

² *Tusc.*, I, 27.

³ *Cf. De Fin.*, IV, 6 ff.

Chief among Cicero's followers was **Varro** (116–27 B.C.), whom Seneca calls *doctissimus Romanorum*. He was more famous as a scholar than as an independent philosopher. Like Cicero, he was a Stoic and an Eclectic. Unlike the other philosophers of Rome, **Titus Lucretius Carus** (95–51 B.C.) is not an Eclectic. In his poem, *De Rerum Natura*, he adheres closely to the doctrine of Epicurus.¹

Under the first emperors, the school of the *Sextians* acquired considerable importance. The founder, **Quintus Sextius**, was born about 70 B.C. He was succeeded by his son, under whose leadership the school came to include among its adherents **Sotion**, **Celsus**, and **Fabianus**. Soon, however, it dwindled into insignificance, so that in Seneca's time it had entirely ceased to exist. From the few scattered utterances of the Sextians which have come down to us and from the account given by Seneca, it is evident that the teaching of the school was Stoicism tinged in one or two points of doctrine with Pythagoreanism.

In the first century of our era there flourished in Rome an important branch of the Stoic school. It included **Lucius Annæus Cornutus** (died A.D. 68), **Aulus Persius Flaccus** (A.D. 34–62), **Lucius Annæus Seneca**, and his nephew **Marcus Annæus Lucanus** (A.D. 39–65). **Seneca**, the most important of these, was born about the beginning of the Christian era at Corduba in Spain. He owed his philosophical training to the Sextians and other Stoics. In A.D. 65, he committed suicide by order of Nero, whose counselor he had been. His writings possess great value as sources for the history of the Stoic school. He agrees in all essentials with the early Stoics, although in many points of detail he follows the later representatives of the school, who modified the doctrines of Zeno and Chrysippus in more than one respect.

Towards the end of the first century **Musonius Rufus** was distinguished in Rome as a teacher of Stoic philosophy. He

¹ Cf. p. 176. On the influence of Lucretius on mediæval philosophy, cf. Philippe, *Lucrèce dans la théologie chrétienne* (Paris, 1896).

confined his teaching, however, more strictly than Seneca had done, to the ethical application of Stoicism. The most important of his disciples was **Epictetus**, the philosopher-slave, a Phrygian, who lived in Rome from the time of Nero to that of Trajan (A.D. 117). The works, entitled *Διατριβαί* and *Ἐγχειρίδιον*, contain the discourses of Epictetus as written down by his disciple, Arrian. Epictetus defines philosophy to consist in learning what to avoid and what to desire. In accordance with this definition, he develops a system of practical philosophy, teaching, with the Stoics, that *happiness is to be found in independence* of external things.

Closely allied to Epictetus is the emperor-philosopher, **Marcus Aurelius Antoninus** (A.D. 121-180). His work, entitled *τὰ εἰς ἑαυτὸν*, consists of aphorisms written down in the form of memoranda, or notes for personal guidance. His teaching agrees with that of the Stoics. He insists more than did the other Stoics on *the kinship of man to God*. In order to secure happiness, man must loose his soul from the bonds of interest in things external and, retiring within himself, learn to become like to God by becoming resigned to the will of God, and by loving all his fellow-men, excluding neither the weak and erring nor the ungrateful and hostile.

Retrospect. The philosophy of the Romans reflects the essential traits of the Roman character. It is practical in its aims; it subordinates theoretical inquiry to problems of conduct, thus depriving itself of the power of systematic development, and condemning itself to the circumscribed task of assimilating and applying what the Greek masters had taught.

Character of Greek Philosophy. We have now reached a point whence we may look back over the whole course of the development of Greek speculation before we turn to the study of a new era, in which Greek civilization and Greek philosophy came into contact with the religions of the East and were influenced by them.

The civilization of Greece had a character peculiar to itself. The "national spirit" (to use a Hegelian phrase) which dominated the life of the nation determined the character of the literature, the art, the political institutions as well as the philosophy of the country. What, then, is the character which the national spirit of Greece imparted to Greek philosophy? The answer to this question is best reached by a comparison of Greek with Oriental philosophy on the one hand, and with mediæval and modern philosophy on the other.

Compared with Oriental philosophy, the philosophy of Greece is remarkable, in the first place, for its manifold completeness. It contained in germ all the systems that were to appear in subsequent times; scarcely a problem of speculative or practical philosophy failed to receive attention at the hands of the philosophers of Greece. Oriental speculation, on the contrary, being centered round a few problems of physics, theology, and ethics, fell far short of Hellenic speculation in breadth and completeness. In the next place, while Oriental thought was stagnant, producing throughout long ages of inquiry not more than a few schools, and exhibiting in its development a certain languid sameness, the course of thought in Greece was free and active, producing a variety of systems of speculation and manifesting all the freedom, force, and suppleness of the Greek mind. Finally, the comparison of Greek with Oriental philosophy furnishes an instance of the essential racial difference between Greece and the Orient. The East was ruled by metaphor, the Oriental mind being strangely averse to the direct and natural mode of expression. The Greek mind, on the contrary, abhorred all intricacy and metaphorical tortuousness; it went towards the truth with a directness, and formulated conclusions with a boldness, which may appear childish in the case of a Thales or an Anaximander, but which, nevertheless, must command our admiration when we come to reflect how far Thales and Anaximander have advanced beyond the mythological

concept of the universe. *Completeness, productive activity, and directness* are, therefore, the qualities which Greek philosophy exhibits when compared with the philosophy of the East.

The comparison of Greek with modern philosophy suggests at the very outset the trait which is most distinctive of Greek civilization. Greek life, Greek art, Greek literature, and Greek religion were *objective*. Modern civilization, on the contrary, is *more subjective than objective*. To this general contrast of Greek life and modern life the philosophy of Greece and modern philosophy offer no exception. At first, in the period of beginnings, Greek philosophy was entirely objective; in the second period, the period of greatest perfection, the subjective element in philosophical speculation received due attention; it was only in the third period, when philosophy began to degenerate, that the subjective element became unduly prominent. In Greek philosophy, at the period of its greatest perfection, in its Golden Age, we find the union of the subjective and objective elements, the belief in the continuity of the spiritual with the material, — a continuity which is not incompatible with the distinction between matter and spirit. We find, too, the conviction that the inquiry into the conditions of knowledge does not destroy, but rather confirms the trustworthiness of our impressions of the external world. Modern philosophy, on the contrary, starts out with the supposition that there is an original antithesis between object and subject, between matter and mind, between the impression of sense and the verdict of pure reason. The Greek, even in his most abstract idealism, was never so abstract as the modern transcendentalist, and in his philosophical realism he always knew how to stop short of the crudeness of materialism. Modern speculation has tended towards centralizing philosophy on self: the Greek always considered that other-self, nature, is the chief subject of inquiry. In a word, Greek philosophy, at least in the Golden Age of its development, was more true to nature than modern speculation is.

This fidelity to nature is, however, a source of weakness as well as of strength. The *spirit of naturalness* prevented the Greek from looking beyond nature for his ideal in art; it prevented him in his philosophy from carrying his theological speculations far enough to determine, for example, the notion of personality. It was left for Christian speculation to complete the work of Plato and Aristotle and, by laboring in the Greek spirit of completeness and manifoldness, to determine, as it did in the Golden Age of mediæval philosophy, that faith and reason are at once distinct and continuous. In this way, Christian philosophy carried the Greek fidelity to nature into the region of the supernatural, refusing to admit an antagonism between these two phases of reality — the world of reason and the world of faith — just as the Greeks had refused to admit the antithesis between mind and matter, which is the postulate of modern philosophy.

Before we come to the philosophy of the Christian era, it is necessary to outline the rise and course of thought in the Alexandrian school; for it was in Alexandria that the ancient world first came into contact with the civilization of the new era.

SECTION C

GRECO-ORIENTAL PHILOSOPHY

The Alexandrian Movement. The scientific movement in Alexandria, of which mention has already been made, was but a phase of the general intellectual revival which was centered in the capital of Egypt during the last centuries of the old era and the first century of the new. This revival may be said to date from the foundation of the city (332 B.C.) by Alexander the Great, who, owing probably to the influence of Aristotle, always held philosophy in the highest esteem and took a lively interest in the spread of philosophical knowledge. After the division of the Macedonian empire, consequent on the death of Alexander, the Seleucidæ in Syria, the Attali in Pergamus, and the Ptolemies in Egypt continued to protect and encourage philosophy. The Ptolemies were especially zealous in the cause of learning, and under their rule Alexandria soon became the Athens of the East,—the center of the intellectual as well as of the commercial life of the Orient,—and the point where the Eastern and the Western civilizations met. The famous *museum*, founded about the beginning of the third century before Christ by Ptolemy Soter, was literally a home of learning, and the no less famous *library* contained all that was best in Grecian, Roman, Jewish, Persian, Babylonian, Phœnician, and Hindu literature. The protection and encouragement extended to learning by the Ptolemies were continued by the Roman emperors after Egypt became a Roman province.

From this intellectual movement there arose a new phase of philosophical thought, which may be broadly characterized as an

attempt to unite in one speculative system the philosophy of Greece and the religious doctrines of the Orient,—an attempt which was rendered particularly opportune by a variety of circumstances. The Jews had settled in large numbers in Alexandria, and there was constant communication between Alexandria and Palestine, which was at that time dependent on Egypt. The translation known as the *Septuagint* had brought the sacred books of the Hebrews within the reach of Greek scholars; and Greek philosophy was not unprepared for the task of adjusting itself to the new ideas thus presented to the Greek mind. Indeed, Greek philosophy had reached the point where, its own resources having been exhausted, it welcomed the inflow of new ideas from the East, which had ever been to the Greek imagination the home of the mysterious and the spiritual. Besides, the conviction was gaining ground that Greek philosophy and Oriental religion had a common origin; what, therefore, could seem more natural than that the two should be reunited? Finally, the movement had a practical as well as a theoretical aim: it was hoped that the diffusion of new religious ideas would bring about a reform of the popular religion. At the end of a generation of scepticism such a reform was sadly needed.

In the movement thus broadly characterized as an effort to reform the intellectual and moral life of the time by a synthesis of Greek philosophy and Oriental religion, the religious element was naturally the dominant element, and the philosophy which resulted was more properly a theosophy than a system of philosophy strictly so called. In the stream of theosophical thought we may distinguish two currents: (1) *Greco-Jewish philosophy*; (2) *Neo-Pythagoreanism* and *Neo-Platonism*. In Greco-Jewish speculation Greek philosophy turned to the religious tradition of the East; in the Neo-Pythagorean and Neo-Platonic systems it turned rather towards a mystic enlightenment, a revelation of the Deity to the individual soul.

CHAPTER XIX

GRECO-JEWISH PHILOSOPHY

Greco-Jewish philosophy may be described as an effort to harmonize the sacred books of the Hebrews with the tenets of Greek philosophy. The Jews of Alexandria were steadfast in the belief that their sacred books contained wisdom infinitely superior to the wisdom of philosophers, yet they could neither resist the inroad of Greek culture and Greek philosophy nor refrain from admiring the wisdom of the Greeks. They set themselves, therefore, the task of finding Plato in the law and of finding the law in Plato, being guided in the accomplishment of this purpose by some such principles as the following :

1. Revelation is the highest possible philosophy: it includes what is best in Greek philosophy.
2. The Greeks derived their doctrines ultimately from the Jewish Scriptures, or at least from Jewish tradition.
3. "The difference between the revealed doctrines of the Jews and the philosophy of the Greeks consists chiefly in this, that in the sacred books of the Jews truth is expressed in symbols and figures, whereas Greek philosophy puts the figure aside and sets before us the thought which the figure expressed."¹

The practical conclusion of all this was the adoption by the Alexandrian Jews of the *allegorical method of interpretation*.

Aristobulus (about 160 B.C.) was the first to apply these exegetical principles in a treatise of which some fragments are preserved by Eusebius.² The first to build on them a system of thought was Philo of Alexandria.

¹ Stöckl, *Lehrbuch der Geschichte der Philosophie* (Münster, 1870; Mainz, 1888), I, 183; English trans. (Dublin, 1887), p. 161.

² *Pr. Ev.*, VII, 14, etc.

PHILO

Life. Philo was an Alexandrian Jew. Little is known of his life beyond the fact that in A.D. 40 he was sent to Rome to represent his co-religionists in their contest with Apion.

Sources. Philo's works, composed in Greek, are very voluminous. Besides these writings we have as sources of information the references which Eusebius, and other writers of the early Church make to the teachings of Philo.¹

General Aim of Philo's Philosophy. It was Philo's aim so to expound the Scriptures as *to bring the revealed religion of the Old Testament into agreement with the philosophy of the Greeks* and especially with Platonism, Aristotelianism, and Stoicism; for to each of these systems he had recourse according as each in turn seemed best suited to the text under consideration. On account of this mixture of different elements it is impossible to find harmony or unity in his philosophical doctrines.

God, the first cause, is the starting point of Philo's system. He is above all created things. From His works we know *that* He exists, but *what* He is is above our comprehension; He transcends all predicates, except the predicate of Being, *ὁ ὢν*, which He applied to Himself: "I am who am." Nevertheless, since men will speak of God after their own fashion, He is called One, Unbegotten, Unchangeable, Free, Independent of all things.²

The World. The Stoics taught that the world is God: Philo teaches that it is the work of God. It is not eternal; it was made, in time, by God, who wished, by creating, to manifest His goodness. God, being supremely immaterial, did not create the world by His own immediate action; He had recourse to the intermediate agency of certain *powers* (*δυνάμεις*), which are described at one time as Divine Ideas and at another as agents,

¹ For bibliography, cf. Ritter and Preller, *op. cit.*, p. 489; Suidas, *op. cit.*, art. *Φίλων*.

² For authorities, cf. Ritter and Preller, *op. cit.*, pp. 491 ff.

souls, angels, and demons. All these powers are comprehended in the Divine Logos.

The Logos. This is one of the peculiar tenets of Philo's philosophy. Philo might have taken the Platonic term *Idea* to designate the Logos, for his notion of the Logos is more akin to the Platonic world of Ideas than to any other notion in Greek philosophy. He chose the word *Logos*, however, because of the biblical use of the term in the expression "Word of God," and because of the Stoic use of it in the phrase λόγος σπερματικός. Indeed, the Logos in Philo's philosophy corresponds to the Stoic concept of a world-soul as well as to the Platonic world of Ideas; for just as in man there are the *extrinsic word* and the *indwelling reason*, so in the Divine Logos we may consider the λόγος ἐνδιάθετος, or aggregate of Ideas in the divine mind, which is divine wisdom, and the λόγος προφορικός, or world-soul, which is divine power pervading all things and giving life to all.

The Logos, then, is the first begotten of God, the Son of God, a God, but not God Himself. *Its principal function is that of mediation*: like the high priest, it stands between the Creator and the creature. Philo, however, fails to determine in any definite manner what the Logos is *in itself*: the obscurity, the vacillation, the apparent contradiction of the expressions which he employs, show how vague is his concept of the nature of the Logos, although he has a definite concept of its function.

Anthropology. In his doctrine concerning man Philo distinguishes the *ideal man*, made to the image and likeness of God, and the *man of our own experience*, in whom he makes a further distinction of rational and irrational natures. At times he elaborates this distinction still further, teaching that there are eight different natures in man. In speaking of the rational soul, he renews the Pythagorean doctrine of transmigration, the Stoic doctrine of the kinship of the soul to God, and the Platonic doctrine of the soul's preëxistence. The soul of man does not differ from the angelic nature. In punishment for some original

sin it was degraded to a union with the body, which is its prison, its grave, the source of all its ills and all its misery.

Theory of Knowledge. Philo distinguishes three faculties of cognition: *αἰσθησις*, which has for its object the concrete and sensible; *λόγος*, which is the reasoning faculty; and *Νοῦς*, which is the faculty of immediate contemplation of intellectual truths. Contemplation, then, is the highest kind of knowledge; by it only can man attain absolute certainty. It is not, however, like reason and sense, dependent on the natural powers of the mind; its light is a light from above, an illumination which God alone can give, and which He gives through the Logos to those who pray for it. This doctrine of *mystical illumination* leads to the ethical doctrine of mystical ecstasy.

Ethics. The body is constantly inclining the soul towards sin. Man's first duty is, therefore, to free his soul from the trammels of the body, to rise above the world of sense, to acquire the *apatheia* which the Stoics inculcated. His next duty is to rise from reason to contemplation, until the soul at last becomes one with the Divine Wisdom, and man and God become united in *mystical ecstasy*. In this ecstatic union consists the supreme happiness of man. Philo, true to his Oriental instinct, places contemplation above action; above the cardinal virtues, which belong to the active life, he places confidence in God, piety, penance, and contemplative wisdom. The possessor of this wisdom, the truly wise, is truly free: wisdom rescues him from the dominion of matter.

Historical Position. Despite the inconsistency of many of his doctrines, Philo exercised a considerable influence not merely on the Gnostics of the first centuries of the Church but also on the Jewish opponents of Scholasticism during the Middle Ages. The most characteristic qualities of his philosophy are its spirit of mysticism, its ethical quietism, and its psychological and ethical dualism — the separation of body and soul, the sources of evil and of good in man.

CHAPTER XX

NEO-PYTHAGOREANISM AND NEO-PLATONISM

During the Greco-Oriental period of its history philosophy seemed to turn to the supernatural for light and assistance. While, however, Philo sought to supply this supernatural element by bringing to bear on philosophical problems the whole wealth of Jewish religious ideas, Neo-Platonism looked for supernatural light, not in any system of religion, but in such communication with the Divine as each man may, by his own individual effort, attain. Neo-Platonism was, therefore, the last effort which pagan philosophy made to save itself from dissolution.

In the Neo-Platonic movement we may distinguish (1) *the transition schools*; (2) *Neo-Platonism in its earlier form*; (3) *the Syrian school*; (4) *the school of Constantinople*; (5) *the Athenian school*; (6) *the Alexandrian school*.

1. **Transition Schools.** The way was prepared for the Neo-Platonic movement by Neo-Pythagoreans and Pythagorizing Platonists who, before the time of Plotinus, agreed in admitting that philosophical knowledge is to be supplemented and perfected by communication with a more or less vaguely defined transcendent, divine something.

The chief *Neo-Pythagoreans* were **Figulus** (45 B.C.), of whom Cicero speaks; **Apollonius of Tyana** and **Moderatus of Gades**, both of whom lived in Nero's time; and **Nicomachus of Gerasa**, who lived in the time of the Antonines.

The philosophy of the Neo-Pythagoreans is a blending of Pythagorean traditions with Platonism, Aristotelianism, and Stoicism. The Neo-Pythagoreans taught a highly spiritual notion of God, in accordance with which they interpreted the numbers and the Ideas of their predecessors to mean Ideas in the mind of God. They attached great importance to the spiritual element in human life, to *mysticism*, *ecstasy*, and *prophecy*; and around the

lives of Pythagoras and Apollonius they threw a halo of supernaturalism, exalting these philosophers into ideals of human conduct, into prophets and servants of God.

Of the *Pythagorizing Platonists*, the best known are **Eudorus of Alexandria** (died about 25 B.C.), **Thrasyllus** (died A.D. 36), **Plutarch** (A.D. 50–125), **Maximus of Tyre** (end of second century), **Celsus** (about A.D. 200), the opponent of Christianity, and **Numenius** (end of second century). To this school belong also the so-called Hermetic books, the writings of the pretended **Hermes Trismegistus**, which date from the latter part of the third century, and come apparently from an Egyptian branch of the school.

All these writers manifest an inclination on the part of the Platonists to admit the religious ideas of the East as supplementary of philosophy. They lay stress on the antagonism between the spiritual and the carnal in man, between the spiritual and the material in the universe, and in order to bridge over the chasm between these antithetical elements they admit the existence of creatures intermediate between God and the material world.

2. **Neo-Platonism in its Earlier Form.** **Ammonius Saccas** (A.D. 176–242) of Alexandria is regarded as the founder of Neo-Platonism. He did not commit his teachings to writing. It is to his disciple, **Plotinus**, that we owe the first written exposition of his system.

PLOTINUS

Life. Plotinus, a native of Lycopolis in Egypt, lived from 205 to 270. In 253 he went to Rome, and there won over to his philosophy the Emperor Gallienus and his wife Salonina. In 263 he retired to Campania, where he died six or seven years later.

Sources.¹ The works of Plotinus consisted originally of fifty-four opuscles. After having, as some maintain, undergone a previous recension at the hands of Eustochius, these opuscles were collected by Porphyry and arranged, according to subject-matter, in six *Enneads*.

¹ For bibliography of Neo-Platonism, cf. Ritter and Preller, *op. cit.*, p. 519. Add Whittaker, *The Neo-Platonists* (London, 1901).

DOCTRINES

General Character of Neo-Platonism. The Neo-Platonists made use of the *ἄγραφα δόγματα*,¹ and, in general, were more influenced by Platonic tradition than by the teaching of the *Dialogues*. In this way they were led to accentuate more and more the *mystical element* in human thought, to *separate matter from spirit*, and to have recourse to the doctrine of *emanations*.

The philosophy of Plotinus centers round three ideas, — the *One*, the *Noûs*, and the *world-soul*, — which for him constitute a kind of philosophical trinity.

The One. Plotinus, like Philo, starts with the notion of God. God is described as the One, the Good, rather than as Being or Mind; for He transcends all Being, and all rational nature. He is the Primal Reality; therefore, He is not properly styled Intelligence, because intelligence (*Noûs*) implies two elements, the act of knowing and the object known, and duality cannot be primal, because it presupposes unity. God, therefore, is absolute unity, undifferentiated by any act of His will or intellect, or by any predication on our part except the predication of unity and goodness. But goodness leads to *emanation*, which is at least an apparent breaking up of the unity of the One into the multiplicity of the manifold. Plotinus, however, explains that created things come from the Primal One, not by a transference of part of the nature of the One, nor by an act of will, but by a process called emanation. The process, then, is not one of *creation*, nor is it a process of emanation in the pantheistic sense; it is an overflow of the perfection of the One Supreme Reality, a beam sent forth from the Infinite Light, — and with these metaphorical expressions Plotinus seems to have contented himself, being unable to describe more definitely the nature of the process of emanation.

Intellect. The first emanation from the One is that of the *Noûs*. The One sheds around itself an *οὐσία*, or *essence*, which,

¹ Cf. p. 95.

like a light, conveys the luster of the One, and is also its image. The image, turning to the One, recognizes itself as an image; thus does the essence become intellect, a dual principle, the source of all subsequent differentiation of the One.

The intellect is, like the Logos of Philo, the *agglomerate of Ideas*: it is, indeed, expressly identified by Plotinus with Plato's world of Ideas. Now, the Ideas are differentiated in the intellect by an act of reflection, precisely in the same way as the intellect differentiated itself from the One by an act of reflection. But the act of reflection, while it distinguishes the Ideas in the intellect, does not dissociate or separate them from it. They sever themselves, because they are essentially operative powers. By this separation they give rise to the world of phenomena, not, indeed, immediately, but through the further mediation of the world-soul.

The World-Soul. As the *Noûs* is an image of the One, the world-soul is an image of the *Noûs*. Being the image of an image, it is, as it were, doubly dual. In fact, while it is in part akin to the intellect, it is in part unlike the intellect, for it is in part essentially inclined to realize the Ideas in concrete phenomena.

However, before we come to the material phenomenon there is still another step, another intermediate emanation. The world-soul gives rise to individual souls, or, more properly, to *plastic forces* (*λόγοι σπερματικοί*); these in turn give rise to *matter*, with which they combine to constitute material phenomena. *Matter*, therefore, emanates from the *plastic forces*, which emanate from the *world-soul*; the world-soul, as we have seen, emanates from *intellect*, and intellect emanates from the *One*. In this way, light, in the series of emanations, becomes darkness; for matter is the antithesis of the One. Matter is multiplicity, change, not-being, privation, the *source of all evil*, the *πρῶτον κακόν*. It is present everywhere in the world of phenomena in composition with the plastic forces, —

in the heavens, where it is united with a most perfect soul ; in the stars, where it is united with the visible gods ; in the powers of air and sky, where it is united with the demons, who mediate between the stars and the souls of men ; in the body of man, where it is united with the human soul ; and in inorganic bodies, where it is united with the lowest of the plastic forces. Wherever it is present, it is the principle of imperfection, limitation, and evil.

Psychological Doctrines. Man is, therefore, a compound of matter and that plastic force which is the human soul. The soul is immaterial : it existed before its union with the body ; it was united to the body in punishment for some primordial guilt. It survives the body, but is liable to be sent back into the bodies of animals or plants according to the degree in which it attached itself to material things during its union with the body. This doctrine of future retribution implies freedom on the part of the soul, and Plotinus maintains the doctrine of freedom in opposition to the teaching of the Stoics.

Return of the Soul to God. Plotinus, following Plato, attaches little importance to the senses as means of acquiring knowledge of reality. In order to attain a knowledge of the ideal, which alone is real, the soul must retire into itself, and there contemplate the intellect which is indwelling in each of us. Proceeding along this path of self-contemplation, the soul rises from the contemplation of the intellect within us to a *contemplation of the One*. This final step is not, however, to be attained unless the One Himself sheds upon the soul a special light whereby the soul is enabled to see the One. In the splendor of that light all apprehension and all consciousness disappear ; the soul is rapt in *ecstasy* (*ἔκστασις*) and is reunited with the One whence all things have emanated. This ecstasy is the supreme happiness of man.

It is, therefore, man's duty first to withdraw from the world of sense by a process of *purification* (*κάθαρσις*), then, freed from

the bonds of sense, to rise in contemplation to God, and thus become truly spiritual, the man of God, the prophet, the wonder-worker (*θαυματοουργός*).

Historical Position. The philosophy of Plotinus is an elaborate attempt to bring the transcendent spiritual element of religion into harmony with the philosophy of Plato, or, more correctly, with the philosophy of the Platonists. Plotinus the pagan attempted to accomplish what Philo the Jew had attempted to accomplish two centuries before. He imagined that by his doctrine of emanations he had bridged over the chasm between the One and the world of sense-phenomena. But, like all monists, he was doomed to failure. His exclusion of volition and thought from the concept of the Deity forbade the introduction of a principle of differentiation; he could not consistently maintain the origin of the multiple from the One.

Among the disciples of Plotinus, **Porphyry** (A.D. 233–304) is best known on account of his treatise, *Εἰσαγωγή εἰς τὰς κατηγορίας*, an introduction to the logic of Aristotle. It was he who reduced the works of Plotinus to their present form. His exposition of the doctrines of Plotinus contains some material additions to his master's teaching in regard to questions of *asceticism*, *the use of magic*, and *the worship of demons*.

3. **Syrian School.** **Iamblichus** of Syria (died about A.D. 330), a pupil of Porphyry, developing the mystico-religious ideas of the Neo-Platonists, elaborated a systematic *defense of polytheism*. Above the One he places the absolutely first; the *Noûs* he divides into an intelligible and intellectual, each of which he subdivides into triads: these are the superterrestrial gods. The terrestrial gods he divides into three hundred and sixty celestial beings, seventy-two orders of subcelestial and forty-two orders of natural gods. Inferior to these are angels, demons, and heroes.

Iamblichus endeavored to introduce the worship of Pythagoras, writing for this purpose a life of Pythagoras, full of legend and fable, — *περὶ τοῦ Πυθαγορικοῦ βίου*.

4. **School of Constantinople.** After the failure of the Neo-Platonic attempt to restore pagan philosophy, an attempt which received the imperial sanction of Julian (who reigned from A.D. 361 to 363), the Neo-Platonists went back once more to the works of Plato and Aristotle, inaugurating an era of more eager study and more elaborate exegesis of the writings of these great masters. At Constantinople, under the patronage of the Christian emperors, **Themistius** devoted himself to the task of commentating the works of Aristotle. Though he remained a pagan, Themistius was obliged to make concessions to the Christian religion, which was just then emerging victorious from its struggle with pagan civilization. Constantinople, however, did not long remain the center of the new movement; its place was taken by Athens, which once more became the focus of the Hellenistic philosophy, and Constantinople disappeared from the history of philosophy, to reappear in Byzantine times.

5. **Athenian School.** About the beginning of the fifth century a new school of Platonism arose in Athens. Its chief representatives were **Plutarchus**, **Syrianus**, and **Proclus**.

Proclus (A.D. 410–485) endeavored by means of Aristotelian dialectic to synthesize and systematize the Neo-Platonic doctrines. He retained the essential elements of Neo-Platonism,—monism, doctrine of the *Noûs*, emanation, antithesis of matter and spirit, mysticism, belief in demons, magic, etc. The principle on which he endeavored to unify all these was that of *triadic development*. That which is produced is similar to that which produces it; at the same time it differs from it, as the derivative differs from the original. By reason of its difference from the original, the derivative differentiates or produces; while by reason of its identity with the original, it tends to return to it. Thus we have the original, the emergence from the original, and the return (in a lower form) to the original, *μονή, πρόοδος, ἐπιστροφή*,—the three stages of the triadic development.

The Absolute Original is the One, superior to all created unity, to all being, to all knowledge. From the One come, by the first emanation, the *henades* (*évades*). They alone are related to the world; they are the supreme gods; it is they who exercise providence over worldly affairs. Next, from the henades come, by a second emanation, the *triad*, intelligible, intelligible-intellectual, and intellectual being, having for chief properties being, life, and thought. Each member of the triad is further differentiated into a *hebdomad*; a series is thus formed, of which each member corresponds to one of the divinities of the pagan pantheon.

The most important point of difference between Proclus and Plotinus is in the doctrine of *the origin of matter*. According to Proclus, matter is derived immediately from the unlimited, the first of the intelligible triads; according to Plotinus, on the contrary, matter is derived from the plastic forces and thus ultimately, through the world-soul and the intellect, from the One.

Proclus maintained that the duty of man is to rise from the sensuous to the supersensuous, in the hope of reaching the *mystical union with God* which constitutes supreme happiness. Like Plotinus, he believed that such a union is impossible without a special illumination from on high, and he advocated as means of attaining this illumination, all the religious helps — magic, demon worship, hero worship — which a decadent paganism could offer.

It was Proclus who gave to Neo-Platonism its final and most complete form. His successor, **Simplicius**, is more important as a commentator than as an independent thinker.

6. **Alexandrian School.** Among the pupils of Proclus was **Ammonius**, who taught at Alexandria during the fifth century. With him are associated the names of **Damascius**, **John Philoponus** (sixth century), **Simplicius**, and **Olympiodorus**. It was at Alexandria that **Hypatia**, during the first decade of the fifth century, attempted to restore pagan philosophy. After her time,

Philoponus and Olympiodorus, the last representatives of Neo-Platonism in the East, became converts to Christianity, and the warfare so long waged between the new religion and the old philosophy came to an end: pagan Platonism gave way before the Platonism of the Christian Church.

Historical Position. Neo-Platonism is Platonism in the condition of senile debility. The contrast between Plato and Proclus is sufficient to show that philosophy degenerated rather than developed in its unequal struggle with the new religion. And the degeneracy was not confined to the speculative portion of Plato's philosophy. That it extended also to ethics is manifest from the substitution of the practice of magic for the practice of virtue.

What prolonged the life of Neo-Platonism was the opposition of the pagan world, and especially of the learned world of paganism, to Christianity. When (A.D. 529) Justinian forbade the teaching of philosophy at Athens, the Platonists emigrated to Persia. Thirty years later there was no Platonism outside the Christian Church.

Neo-Platonism is the last phase of pagan philosophy. Although the most important systems of Neo-Platonism fall within the Christian era, they belong in spirit and in contents to the pagan world. With the history of Neo-Platonism, therefore, the history of ancient philosophy comes to an end.

PART II

**PHILOSOPHY OF THE CHRISTIAN
ERA**

INTRODUCTION

ALL who have studied the history of human thought in the light of the Christian idea of Providence have regarded the philosophy of Greece and Rome as a *præparatio evangelica*, — a preparation for the Gospel of Christ. The Church which Christ founded was not, it is true, a school of philosophy. By virtue of its divine commission, it rose above all schools and all systems. Still, although Christ in his teachings discarded all formal definition and formal proof, these teachings reformed the world of speculation as they reformed the practical ideals of men, and the Church, being by its nature and essence endowed with that power of adaptation to external conditions which is characteristic of a living organism, has an inherent right to speak to each generation in the language which that generation best understands. In the systematic development of dogmatic truth the Church avails itself of the doctrines of philosophers and formulates its dogmas in the language of the schools of philosophy.

Thus, the coming of Christ divides the history of philosophy as it divides the history of the world. From this point onward there will be the religious view and the rationalistic view of every question. Philosophy may profit by the teachings of religion; it may accept revelation as an extension of the horizon of human hopes, an opening up of new fields of human investigation; it may acknowledge the debt due to that institution to whose teaching we owe it that "doctrines concerning the nature of God, the immortality of the soul and the duties of men, which the noblest intellects of antiquity could barely grasp, have become the truisms of the village school, the proverbs of the cottage and of the alley."¹ Or, on the contrary, philosophy may deny the

¹ Lecky, *Hist. of European Morals* (third edition, New York, 1880), Vol. II, p. 3.

special authority of Christian revelation ; it may cite the doctrines of Christ and His Church before the tribunal of reason, and pass sentence on them, denying the right of appeal to a higher court. Henceforth, then, there will be the religious attitude and the rationalistic attitude in presence of the great problems which ancient philosophy discussed without reference to any source of knowledge superior to reason itself. Christianity will be an ever-present factor in philosophical speculation : the rationalist who refuses its aid and the religious philosopher who accepts that aid must show reason for such refusal or acceptance. But, though the rationalistic spirit and the religious spirit pervade the whole history of the philosophy of the Christian era, they are not always present in equal proportion or in equal strength. From the first to the fifteenth century the religious spirit prevailed, while from the fifteenth century onward, the rationalizing spirit remained preponderant. There were rationalists in the first centuries, and there were religious-minded philosophers in the nineteenth ; the difference on which the division is based is a difference in the spirit of the age, not in the character of individual philosophers. The prevailing religious period is divided, according to another basis of division, into Patristic philosophy, extending from the first century to the period of the great invasions of the barbarians, and Scholastic philosophy, which begins with the reconstruction of European civilization in the ninth century and ends with the Reformation in the fifteenth. We may therefore divide the philosophy of the Christian era as follows :

SECTION A — PATRISTIC PHILOSOPHY, extending to the end of the fifth century.

SECTION B — SCHOLASTIC PHILOSOPHY, extending from the ninth century to the fifteenth.

SECTION C — MODERN, OR POST-REFORMATION PHILOSOPHY, extending from the fifteenth century to our own time.

SECTION A

PATRISTIC PHILOSOPHY¹

FROM the account given of pre-Christian systems of speculation it should be evident that philosophy, like every other department of human thought and human activity, is continuous in its growth. In philosophical speculation there is no possibility of breaking completely with the past, and so the philosophy of the first Christian writers was connected in its origin with the systems that preceded it. These writers took whatever truth the older systems contained and made it part of their own theory of reality, rejecting whatever contradicted the teachings of faith or whatever could not bear the light of reason reënforced by the light of revelation. From the beginning, however, the rationalizing spirit of which mention has been made, began to assert itself in a tendency on the part of some Christian writers to subordinate revelation to the teachings of pagan philosophy. It was from this tendency that the heretical systems sprang. At the same time, the religious spirit, working in the minds of the orthodox exponents of the teachings of Christianity, led them to place high above all human speculation the authority of Christ and His Church, although they did not reject the philosophy of the pagan world, but made use of it in their expositions of revealed truth. Writers of this class are the true philosophers of the early Christian era. On account of the influence which they

¹ For description of collections of *Sources*, cf. Bardenhewer, *Patrologie* (Freiburg im B., 1894), pp. 14 ff.; Fessler-Jungmann, *Institutiones Patrologiæ* (2 vols., Innsbruck, 1890), pp. xi ff. and 100 ff.; Schmid, *Manual of Patrology*, trans. by Schobel (St. Louis, 1899), pp. 21 ff.

exerted on succeeding generations, they are styled the *Fathers*, or spiritual progenitors of the Church's theology and philosophy. The orthodox Patristic philosophers are to be subdivided according as they undertook merely to defend Christianity against the misconceptions and calumnies of paganism, or sought to establish a positive system of Christian speculation. The *Apologists*, as the former are called, belong chiefly to the period of intellectual struggle which preceded the great Council of Nicæa (A.D. 325). The constructive thinkers of the Patristic period belong, for the most part, to the post-Nicene age.

It will, therefore, be convenient to study:

- I. *Heretical Systems.*
- II. *Ante-Nicene Fathers.*
- III. *Post-Nicene Fathers.*

CHAPTER XXI

HERETICAL SYSTEMS

Of the heretical systems which sprang up during the first centuries of the Christian era, *Monarchianism*, *Arianism*, and *Apollinarism* belong exclusively to the history of theological opinions. *Gnosticism* and *Manicheism* are of greatest interest in the history of Patristic philosophy.

Sources. Besides the work entitled *Pistis Sophia* and a few fragments, which constitute the entire body of original Gnostic literature, we have the writings of *Irenæus* and *Hippolytus*. To these must be added the works of *Clement of Alexandria*, *Origen*, *Eusebius*, *St. Augustine*, and the second of the *Enneads* of *Plotinus*. For our knowledge of Manichean doctrines we are indebted to the writings of *St. Augustine*.

Gnosticism. *Cerintus*, *Saturninus*, *Marclon*, *Carpocrates*, *Basilides*, and *Valentinus*, all of whom flourished during the second century, were the principal teachers of the Gnostic doctrine,

Dissatisfied with the explanation which the Christian religion had to offer on such questions as the origin of evil and the nature of man, the Gnostics turned to pagan philosophy for a solution of these and other problems. But, while they thus made reason the basis and criterion of all truth, they were not willing to set aside altogether the authority of Christ's teaching. They had recourse, therefore, to the theory that Christ, besides the *exoteric* doctrines which He imparted to all His listeners, committed to His chosen disciples a higher *esoteric* doctrine, which constitutes the true essence of Christian teaching. This *esoteric doctrine*, *γνῶσις*, is the alleged source of all that the Gnostics taught.

In point of fact, the Gnostic teaching is a mixture of the philosophies of Philo and Plotinus with certain elements of Christianity. The Gnostics maintained the essential antithesis of the spiritual and the material; the origin, by emanation from God, of numberless *æons*, the sum of which is the *pleroma*; and the final return of all things to God by a *universal redemption*. They recognized no mystery in the Christian sense of the word, the *gnosis* being the merest subterfuge, and human reason the really ultimate test of all truth, supernatural as well as natural.

Manicheism. This sect was founded by **Manes**, a Persian, who in the third century became a Christian and sought to introduce into Christian theology and philosophy the Parsee conception of the dualism of God and Matter. There is no doubt that his followers, in developing the teachings of the founder of the sect, were influenced to a large extent by the Gnostic dualism, and laid claim, as the Gnostics did, to a special *gnosis*. They concerned themselves chiefly with *the problem of evil*, assuming the existence of two eternal principles, the one essentially good and the other essentially evil, and deriving from the latter all the evil, physical and moral, which exists in the world. They maintained that from the good principle there

emanated, in the first place, primeval man, who was the first to enter into the struggle with evil; in the next place the Spirit of Life, who rescued primeval man from the powers of darkness; finally the World-Soul, Christ, the Son of primeval man, who restored to man the light which he had lost in the struggle with darkness. They distinguished in man two souls — the soul that animates the body, and the soul of light, which is part of the World-Soul, Christ. The former is the creation of the powers of darkness, the latter is an emanation from light itself. Thus, man's soul is a battlefield on which light and darkness are at war, as they are in the universe. Human action depends on the outcome of the contest: there is no freedom of choice. All matter is evil and the cause of evil.

CHAPTER XXII

ANTE-NICENE FATHERS

To the period extending from the beginning of the Christian era to the end of the third century belong the great Apologists, such as **Justin Martyr** (100–160), **Athenagoras** (died about 180), **Tatian**, and **Theophilus** (both belong to the end of the second century), who devoted their attention to the defense of Christianity against the last attacks of the representatives of pagan civilization. The period includes also **Irenæus** (140–202), **Hippolytus** (first half of the third century), and **Tertullian** (160–240), whose life work consisted in the refutation of the Gnostics and other heretics. Finally the period includes **Clement of Alexandria**, **Origen**, **Arnobius**, and **Lactantius**, who, during the third and fourth centuries, expounded in their catechetical treatises the dogmas of Christianity, and developed in their exposition the first systems of constructive Christian philosophy.

Tertullian's hostile attitude towards philosophy is expressed in the well-known *Credo quia absurdum*, which is attributed to him.

It must be remembered, however, that Tertullian, being a controversialist, was not always so measured in his language as he might have been, had he, like Clement and Origen, devoted himself to the task of building up a system of positive doctrine.

Clement of Alexandria¹ (died about A.D. 217), in the *Cohortatio ad Gentes*, the *Pedagogus*, and the *Stromata* (Στρωματεῖς), exposes the extravagances and absurdities of paganism, and undertakes a systematic arrangement and defense of the moral and dogmatic teachings of the Church. Following Justin, he maintains on the one hand that whatever is true in Greek philosophy is to be traced to the Divine Logos, who "enlighteneth every man that cometh into the world," and on the other hand that whatever errors are found in Greek philosophy must be attributed to man's weak and erring nature. The true *gnosis* is not the alleged esoteric doctrine of Christ, but the teaching of the Gospels and of the Church which Christ founded. He who assents to the teaching of Christ and the Church, without striving, by the aid of philosophy, to give an intellectual basis to his assent, possesses *faith*, but he does not possess the *gnosis*, which is to faith what the full-grown man is to the child. Just as the Stoics idealized the "wise man," so did Clement set up the Christian Gnostic as the idealized type of the Christian.

Origen² (185-254), a disciple of Clement, possessed by far the most synthetic mind among the Christian writers of this period. In his work, *περὶ ἀρχῶν*, he exhibits a sense of system more imperative than that shown by any of his predecessors or contemporaries. He assimilated into his exposition of Christian dogma, elements from Plato, Aristotle, Philo, the Neo-Platonists, and the Gnostics. On such questions as the preëxistence of the human soul, the eternity of the world, and the *final return* of all things to God (*ἀποκατάστασις*), his orthodoxy has been a matter of dispute. His greatest achievement was the scientific

¹ Cf. Fessler-Jungmann, *op. cit.*, Vol. I, pp. 277 ff.

² *Ibid.*, pp. 282 ff.

formulation of the *creationist account of the origin of the universe*. It is true that Clement also taught the doctrine of creation, but he did not develop it so systematically as did Origen.

Historical Position. Clement and Origen are representatives of the great school of Alexandrian speculation which, in the third century, renewed the intellectual and philosophical prestige of the ancient capital of Egypt. Successful as Greek philosophy had been in defining the relations between matter and spirit, it had failed to determine satisfactorily *the notion of personality* and to explain the origin of primal matter. This is what Patristic speculation accomplished by its definition of the personalities of the Divine Trinity and by its *doctrine of creation*. The work begun by Clement and Origen was completed by their successors after the Council of Nicæa.

CHAPTER XXIII

POST-NICENE FATHERS

The period extending from the Council of Nicæa (325) to the end of the fifth century was one of great literary and speculative activity in the Christian Church ; for, although the definitions of the council stayed the progress of the Arian heresy, still the contest with the Arians was by no means ended. Day by day the theology of the Church was organized into a system which offered an impregnable front to heretic and schismatic, and, side by side with theology, there developed a stronger and more complete philosophy which, chiefly through the influence of the Latin Fathers, discarded the last remnants of Neo-Platonism and Gnosticism, and sought inspiration in the earlier and healthier form of Platonic teaching.

Among the *Greek Fathers* of this period are **Athanasius** of Alexandria (died 373) and the three Cappadocians, **Gregory** of Nyssa (331-394), **Basil** (died 379), and **Gregory Nazianzen** (born

330). These men devoted their energies to the defense of the Church in the great Trinitarian controversy, as did also **Cyril** of Alexandria (died 444) in the controversy with Nestorius concerning the personality of Christ.

Besides these writers there flourished, towards the end of the Patristic period, two others who devoted special attention to philosophy — **Pseudo-Dionysius** and **St. John of Damascus**.¹

Pseudo-Dionysius.² The works entitled *De Divinis Nominibus*, *Theologia Mystica*, and *De Cœlesti et Ecclesiastica Hierarchia*, which were at one time attributed to St. Dionysius the Areopagite, of whom mention is made in the Acts of the Apostles, are now universally acknowledged to belong to the end of the fifth century. They contain the last exposition of *Christian Neo-Platonism*. The ineffable superiority of God with respect to the world, the emanations (*processiones*) of creatures from God, the arrangement of all created beings in a scale of gradual descent from God, the final return of all things to their first source, the return of man to God by means of contemplative ecstasy — all these Neo-Platonic elements are present in the philosophy of Dionysius. There can, however, be no doubt that Dionysius understood these doctrines in a sense perfectly compatible with the teaching of the Church. The works of Dionysius, as well as those of his follower, **Maximus Confessor** (580–662), were translated by John Scotus Erigena at the beginning of the Scholastic era.

St. John of Damascus (end of the seventh century) composed a work entitled *Fountain of Knowledge* (πηγή γνώσεως) and a treatise *De Fide Orthodoxa*. In the former he gives an exposition

¹ On **Nemesius**, bishop of Emesa (about A.D. 450), and his relation to St. John Damascene, cf. Domański, "Die Psychologie des Nemesius," in *Beiträge zur Geschichte der Philosophie des Mittelalters*, Bd. III, Heft 1 (Münster, 1900). Nemesius' works are printed by Migne, in the *Patr. Græca*, Vol. XL. His most important treatise was translated under the title, *The Nature of Man*, by George Wither, London, 1636.

² For bibliography, cf. Fessler-Jungmann, *op. cit.*, Vol. I, p. 635.

of Aristotelian dialectic and ontology, or science of being. By some he is said to be the author of the saying, Philosophy is the handmaid of theology (*ancilla theologiæ*). The phrase is probably of later origin.¹

Among the *Latin Fathers* of this period are to be mentioned **St. Hilary** (died 368), **St. Ambrose** (340–397), and **St. Jerome** (346–420). They belong to the history of theology rather than to that of philosophy. It was in the writings of **St. Augustine** that Patristic philosophy attained the zenith of its course. Augustine is the greatest as well as the last of the masters of speculative thought who made it possible for the Patristic age to hand down to the Middle Ages a complete system of Catholic theology. At the same time he stands among the foremost of the world's great philosophers.

ST. AUGUSTINE

Life. Aurelius Augustinus was born at Tagaste, in Numidia, in the year 354. His father, Patricius, was a pagan; his mother, Monica, was a most exemplary Christian. At Madaura and at Carthage, whither he went for the purpose of completing the education begun in his native city, Augustine was lured into the career of sin which he describes in his *Confessions*. During this period of his life it seemed to him that the Manichean sect offered the best solution of the enigma of existence. Later, however, when, after having completed his education, he taught rhetoric at Carthage and at Rome, the contradictions in which he perceived Manicheism to be involved drove him to the Academy, where he learned to be content with probability in lieu of certainty. There also he learned to study Plato, and it was Plato who first stirred within his soul the impulse to rise from the moral degradation into which he had fallen. To the influence of these studies must be added the prayers of his mother and the persuasive eloquence of St. Ambrose. Augustine was baptized in the year 387. After his conversion he devoted himself to the study of the Scriptures, to the refutation of Manichean and other heresies, and to the task of instituting a systematic philosophical inquiry concerning God and the

¹ Cf. Stöckl, *Lehrbuch*, I, 317.

human soul. In 395 he was made bishop of Hippo, in Africa ; he died in 430, after thirty-five years of active episcopal administration.

Sources. The principal works of St. Augustine which are of interest in the study of his philosophy are *Contra Academicos Libri III*, *Soliloquia*, *De Immortalitate Animæ*, *De Libero Arbitrio*, *De Civitate Dei*, *Confessiones*, *Retractationes*, and his treatises against the Manicheans. The treatise entitled *Principia Dialectices* may be genuine, although the treatise *Categoriæ Decem*, which is usually appended to it, is certainly spurious.¹

DOCTRINES

General Idea of Philosophy. The central ideas of St. Augustine's philosophical inquiry are *God* and the human *Soul*. "Deum et animam scire cupio. Nihilne plus? Nihil omnino." "Deus, semper idem, noverim me, noverim te."² On the problems of the existence of God and the nature of the soul, all philosophical science — ethics, physics, dialectic — is made to converge. Knowledge which cannot be brought to bear on the soul, teaching it to love God, is unprofitable ; it is the knowledge which "puffeth up." Far from assenting to the maxim attributed to Tertullian, — "Credo quia absurdum," — Augustine viewed the relation between faith and reason in the light of the principles which the Scholastics formulated in the maxims, "Credo ut intelligam," "Intelligo ut credam." He says, for example, in *De Prædestinatione Sanctorum*,³ "Nullus quippe credit, nisi prius cogitaverit esse credendum," and in *De Vera Religione*,⁴ "Nostrum est considerare quibus vel hominibus vel libris credendum sit." St. Augustine, however, does not define accurately the relations between philosophy and theology ;⁵ this was a task reserved for the master mind of the thirteenth century.

¹ Cf. Migne, *Patr. Lat.*, Vols. XXXII ff. To the bibliography given by Fessler-Jungmann, *op. cit.*, Vol. II, p. 250, add Martin, *Saint Augustin (Grands Philosophes series*, Paris, 1901).

² *Soliloquia*, I, 2, and II, 4.

³ II, 5.

⁴ XXV, 46.

⁵ Cf. *De Vera Religione*, XXIV ff.

Theory of Knowledge. In his treatise *Contra Academicos*, St. Augustine begins by discussing the possibility of arriving at certain knowledge. ¹ The Academy maintained that a high degree of probability is the most that the human mind can attain. St. Augustine refutes this assertion, and proves by the following arguments that *certitude is possible* of attainment.

1. Probability supposes certitude; for that is probable which is like the truth. If there is no truth, there is no probability.¹

2. No one can be happy unless he possesses wisdom; for all men desire wisdom, and no one is happy unless he attains that which he desires. To deny that wisdom is possible of attainment, is, therefore, to deny that happiness is possible.²

3. The alleged inability of man to attain certitude is not founded on fact. It is not true that the senses are altogether untrustworthy, nor is it true that thought is utterly dependent on the impressions of the senses. It would be absurd to suppose that intellect is not more reliable than sense.³

4. The possibility of arriving at certainty may be proved by positive argument. For, whatever else is called in question, our own mental states are beyond the region of doubt. You may doubt whether you are one or multiple, you may doubt whether you are moving or at rest, but you cannot doubt that at this moment *you think*.⁴ You may contend that I am deceived, but the very fact that I am deceived proves that I exist. "Quod si fallor, sum!" A man's doubt proves that he exists, "Quandoquidem etiam si dubitat, vivit."⁵

This last argument certainly suggests the Cartesian "*Cogito, ergo sum*." It must, however, be remembered, that while Descartes, according to the commonly received view, intended his argument to be a demonstration (if, indeed, he intended the "*Cogito, ergo sum*" to be an argument at all), Augustine

¹ *Contra Academicos*, II.

² *De Immortalitate Animæ*, X.

³ *Op. cit.*, III.

⁴ *Soliloq.*, II, 1.

⁵ *De Trinitate*, X, 14.

intended the "Quod si fallor, sum," to be merely an indirect refutation of the principles of the Academy, and not a direct demonstration of the existence of the thinking subject.

Having shown that certainty is possible of attainment, St. Augustine proceeds to inquire into the *conditions of intellectual knowledge*. There are two ways, he says, in which the human mind arrives at a knowledge of intelligible objects. The first is by rising from the data of sense to an understanding of the hidden causes of things, and, ultimately, to a knowledge of Him Who is the Highest Cause. This is the process of which St. Paul speaks: "Invisibilia Dei per ea quæ facta sunt intellecta conspiciuntur."¹ The second method is one of introspection. "Noli foras exire," he says, "in te ipsum redi; in interiore homine habitat veritas."² The truth is indwelling in us. The most excellent means of attaining higher intellectual knowledge is the contemplation and study of our own intellectual life. For this, purity of heart and the practice of virtue are necessary. The purer the heart, the freer is the soul from all defilement, and the more perfectly will the mind mirror truth; for then it will mirror Him Who is the source of all truth. This leads to the next point in St. Augustine's theory of knowledge.

God is the source of all truth. This principle is proved as follows: "In order to know anything as good or beautiful or true, and to distinguish it from what is not good or beautiful or true, we must possess a rule, or standard, by which our judgment regarding the object in question is determined." Our standard, in order to be trustworthy, must be immutable, and in order to be available, it must be present to our minds. Such a standard — absolute, immutable, omnipresent goodness and truth and beauty — is God.³ In this light, the light of eternal truth, is all truth known. Whether we rise in contemplation from the

¹ *De Genesi ad Litteram*, IV, 32.

² *De Vera Relig.*, XXXIX.

³ *De Libero Arbitrio*, II, 12, 16; cf. Stöckl, *op. cit.*, I, 293.

data of sense to the hidden world of intelligible objects, or from an introspective knowledge of self to a knowledge of higher truths, we do so in virtue of the illumination which is the light of the glory of God. In the Word of God, which is the wisdom of the Father, there dwell the unchangeable essences, the reasons of things (*rationes rerum*), the types according to which all things were made. To deny the existence of these archetypal forms would be to maintain that God created things irrationally. He, the all-wise Creator, made all things according to His wisdom, that is, according to the *rationes æternæ* indwelling in the Word: "Singula propriis creata sunt rationibus."¹ Corresponding to the ectypes in the world of concrete existence are the prototypes, whose *locus* is not a separate intelligible world, but the Divine Wisdom, the Logos, the Son of God. This, according to St. Augustine, is what Plato, inspired by biblical teaching, understood by the *τόπος νοητός*.²

God is, therefore, the source of all truth and of all intellectual light. In Him are the essential types of truth; He it is Who illumines the ectypes so that from a knowledge of them we may rise to a knowledge of truth, and He it is Who illumines the soul itself from within, so that when we turn our thoughts inward on the soul, we may rise in contemplation to Him Who is the light of the soul, as the sun is the light of the physical world.

* In St. Augustine's theory of knowledge the lines of thought are undoubtedly Platonic. The Ontologists, however, are mistaken when they understand the Platonism of St. Augustine to include the doctrine of immediate intuition of God, or of the divine ideas. When he teaches that we know the essences of things in *rationibus æternis*, he is careful to point out that we rise from the data of sense or from a study of our own intellectual life to a knowledge of these essences. His meaning is that the essences of things could neither be, nor be known by us, unless they first existed and were known in the mind of

¹ *Questiones Octoginta Tres*, Cap. 46.

² Cf. *De Civ. Dei*, VIII, 11.

God. That there is a divine element in our knowledge of created things, St. Thomas as well as St. Augustine maintained. It is God Who made the objects of our knowledge, Who endowed the mind with the power whereby it abstracts from the data of sense the necessary and universal element which is the object of thought, and Who coöperates in the act of the mind by which the potentially intelligible is rendered actually intelligible. In this sense does the Word illumine every man that cometh into the world. It is clear, then, that the Ontologists exaggerate the divine element in human knowledge when they maintain that we have immediate intuition of God and of the ideas contained in the Divine Mind. Such exaggeration was as far from the mind of the Plato of Christianity as it was from the mind of the great Christian Aristotle of the thirteenth century. It must be admitted, nevertheless, that the Platonic form of St. Augustine's teaching lends more favor to the Ontologist's interpretation than does the Aristotelian form in which St. Thomas expressed his theory of knowledge.¹

Theology and Cosmology. While admitting the validity of the teleological argument for the existence of God, as well as that of the argument from the testimony of conscience,² St. Augustine bases his whole system of theodicy on the argument derived from the immutability and permanence of the object of our intellectual knowledge. The argument is as follows: We know the truth and we strive for the good. But nothing is true or good in this world of change and imperfection except in so far as it participates in the absolute truth and goodness of Him Who never changes. Whoever denies that God exists must be prepared to maintain that knowledge and virtue have no object. The existence of God is, therefore, *the essential condition of the moral and intellectual life*.

¹ Cf. St. Thomas, *Sum. Theol.*, I^a, LXXXIV, 5, c; St. Augustine, *Quest.*, LXXXIII, Cap. 46; Piat, *Quid Divini Nostris Ideis Tribuat Divus Thomas* (Paris, 1890).

² *De Lib. Arbitr.*, II, 12, 16.

God cannot be comprehended by the human mind. He is *above all predicates and all categories*. When, therefore, we speak of Him, we are nearer to the truth when we say what He is not, than when we say what He is : when we speak of God we are little children lisping a language which we do not understand. "Deus melius scitur nesciendo," and again, "Verius, enim, cogitatur Deus quam dicitur, et verius est quam cogitatur." This truly Christian humility in presence of the great problems of theodicy we shall find to be as characteristic of the great masters of Scholasticism as it is of the greatest of the Patristic philosophers. The Fathers and the schoolmen were as willing as any modern agnostic is to admit the inability of the human mind to grasp the truth of God's nature and the inadequacy of human language to express our thoughts about God.

God is immutable, eternal, all-powerful, all-knowing, absolutely devoid of potentiality or composition. He is form without matter, essence unparticipated.

In his account of the *origin of the universe*, St. Augustine maintains that God from all eternity designed to create the world. God did not create matter, however, until the beginning of time ; for before matter existed, time did not exist. God is the cause of matter as well as of intelligible being. He made it out of nothing (*creation*) ; it did not proceed from the substance of God (*emanation*).¹ Together with matter all things else were created at the beginning : "Creavit omnia simul." Creation was the act of an instant, the Mosaic account of the six days of creation being merely a description of the six orders or grades of perfection in which things were created. Not all things, however, were created in the full possession of what came to be called their specific perfection. Augustine distinctly admits a process of development, as when, in the treatise entitled *De Genesi ad Litteram*, he says : "In semine, ergo, illa omnia

¹ *De Civ. Dei*, XI, 4 ff.

fuerunt primitus, non mole corporeæ magnitudinis sed vi potentiaque causali" (V, 23). Here he is alluding to the *seminariæ rationes*, of which he speaks elsewhere as destined ("cum data fuerit opportunitas temporalis et causalis") to develop (*prorumpere*) into their proper species.¹

God is not the author of evil; He merely permits it. The order of the universe and the gradation of beings require that some things should be less perfect than others. God would not permit evil if He could not draw good from it. Moral evil alone is opposed to the Divine Will.² Man is a microcosmos, a compendium of the universe. He is the only being that mediates between God and matter; for, while Augustine admits the existence of ministering angels, he rejects the whole celestial and terrestrial hierarchy of the Neo-Platonists.

Psychology. The soul is simple, immaterial, spiritual. It is devoid of quantity: it has no extension in space. In his proof of the immateriality of the soul, St. Augustine has recourse, among other arguments, to the following, which was formulated before his time by Plotinus: "If the soul were not immaterial, it could not be in all parts of the body at the same time. Now the soul is in all parts of the body at the same time, for wherever an impression is made upon the body, the soul perceives that impression, and it is not *part* of the soul that perceives, but the whole *ego*. Therefore, the soul is immaterial."³

The soul is essentially individual: the notion of a universal soul is absurd. Equally absurd is the doctrine of transmigration; for that which is immaterial cannot enter into composition with that which is material and irrational. Mortality is the only bond of kinship between man and brute. The angel, like man, possesses a body; but the angelic body is immortal. The brute possesses a mortal body, but the soul of the brute is irrational. Man is, therefore, unique in this, that he is an *animal rationale mortale*.

¹ Cf. González, *Historia de la Filosofía* (segunda edición, Madrid, 1886), II, 80.

² *De Civ. Dei*, XI, 17, 18.

³ *Ep. CLXVI ad Hieronymum*.

The arguments which St. Augustine adduces in favor of the *immortality of the soul* savor of Platonic influence. They are as follows:¹

1. That in which the imperishable exists must be imperishable. Imperishable truth dwells in the soul. Therefore the soul is imperishable. .

2. The soul is inseparable from reason; for reason and the soul are not united in space, and it is only in space that separation can take place. But reason is imperishable, because the principles of reason are immortal. Therefore the soul cannot perish.

3. The body is animated, that is, endowed with life. The soul, on the contrary, *is* life. To maintain, therefore, that the soul could be deprived of life would be to say that life is not life or that the soul is not the soul.²

With regard to the *origin of the soul*, St. Augustine teaches that the soul of Adam was created at the beginning: "Creavit Deus omnia simul." At some subsequent time the soul of Adam was united to the body, not because of any sin on the part of the soul, but because the soul requires the body. The souls of the descendants of Adam come into existence at the moment of their union with the body. As to *how* they come into existence, whether by an act of creation (*creationism*), or by virtue of the generative process by which the body originates (*traducianism*), St. Augustine is unable to decide.³

The soul and body together form one substance,—man. The soul gives being and species to the body. It acts on the body. The body, however, has no independent power of acting on the soul: whatever power the body possesses is conferred on it by the soul itself. Between soul and body is interposed a subtle element, partaking at the same time of the material nature of the body and of the spiritual nature of the soul: it

¹ *Soliloq.*, II, 2 ff.

² *Cf. superius*, pp. 111, 112.

³ *Cf. Stöckl, op. cit.*, I, 301.

is analogous to light and air. The function of this element is to mediate between the soul and the organs of the body, and to unite, in some mysterious manner, soul and body in one substance.¹

The *faculties of the soul* are thus classified:

Faculties of sense	{ Appetite Knowledge	{ External senses Internal senses	{ <i>Sensus communis</i> Imagination, or <i>vis spiritualis</i> Sensuous memory
Faculties of the soul as spirit	{ Will — <i>Voluntas, Liberum Arbitrium</i> Knowledge	{ Intelligence Intellectual memory	{ Intuitive — <i>Mens</i> Discursive — <i>Ratio</i>

St. Augustine attaches special importance to the idea of *will*. "Voluntas est quippe in omnibus, omnes nihil aliud quam voluntates sunt."² It is the will that moves the intellect to action, and it is the element of will in the act of faith that makes faith meritorious. Free will is the proximate cause of moral evil.

St. Augustine's discussion of free will in its relation to grace and predestination belongs to the history of theology.

Ethics. The *supreme good* of man consists in the eternal contemplation and love of God in the life to come. Here on earth man's duty is so to act that he may attain the happiness which is reserved for him beyond the grave. The path of duty is clearly marked out by the Divine Law. The destiny of the human soul and the law of God are, therefore, the determinants of moral good.

To fulfill the law, man must practice *virtue*. Virtue is defined, "Ars bene recteque vivendi."³ Virtue does not imply apathy, as the Stoics taught: the emotions are not to be destroyed or eradicated, but to be kept under control and restrained within the limits prescribed by the *Law of God*. Now the Law of God is

¹ Cf. *De Immort. Anima*, Cap. 15; *De Quantitate Anima*, Cap. 30.

² *De Civ. Dei*, XIV, 6.

³ *Op. cit.*, XIV, 9.

the Law of Love. Man should love God above all things; he should love himself with a rational love, seeking what is best and doing what is best for himself in the light of his eternal destiny; he should love his fellow-man, desiring what is best for him and aiding him to attain it. Charity, therefore, which is love, is the foundation of all virtue: on this foundation are built *prudence, fortitude, temperance, and justice*.¹

Historical Position. Even from this summary sketch of the philosophy of St. Augustine it is possible to glean something of the vastness of his system of speculative thought. His inquiries cover the whole range of speculation; he synthesizes the best elements of pagan philosophy into a system of Christian thought; and wherever his inquiries lead him he exhibits that spirit of coherent system, that perfect grasp of his subject, that sublimity of thought and language which distinguish him among all the philosophers of Christian times as the Plato of Christianity. And when we remember that St. Augustine was as distinguished among theologians as he was among philosophers, we realize that his was a mind almost superhuman in its transcendent power of synthesis.

The debt which philosophy owes to St. Augustine includes, besides many original contributions to the definition of the Christian concept of God, of the human soul, and of the destiny and duty of man, the first essay on the part of a Christian philosopher to discover and expound the philosophy of human history. In the treatise *De Civitate Dei* he appears as the exponent of the "law of progress which governs the history of humanity, and of which even those who fight against it become instruments in the hands of Providence according to the Divine plan."²

It is scarcely necessary to call attention to the preponderance of the influence of Plato on the philosophic thought of St. Augustine. Like all the other Fathers of the Church, St. Augustine

¹ Cf. Stöckl, *op. cit.*, I, 306; English trans., p. 281.

² Cf. *De Civ. Dei*, I, 8.

esteemed Plato more highly than Aristotle. The latter he styled "Vir excellentis ingenii, et Platoni quidem impar, sed multos facile superans."¹ Although, however, the era of Christian Platonism virtually came to an end with Augustine, the Scholastic era, in which the importance of Aristotle grew until it reached its maximum in the thirteenth century, was not oblivious of the debt which Christianity and philosophy owe to the man who first Christianized the teachings of Plato.

The period between the death of St. Augustine and the rise of Scholasticism is one of comparatively little intellectual activity. Throughout Europe, men like **Claudianus Mamertus** (middle of fifth century), **Boethius** (470-526), **Cassiodorus** (468-575), **St. Isidore of Seville** (seventh century), and **Venerable Bede** (674-735) labored merely to preserve what the past had bequeathed and to transmit the legacy to times more favorable for the growth and development of Christian speculation.²

Retrospect. Patristic philosophy exhibits all the characteristics of the age to which it belonged, — the era of the struggle and triumph of Christianity and of the first adjustment of Christian thought to pagan civilization and culture. To the period of struggle belongs the work of the Apologists; to the first centuries of triumph belong the earliest constructive attempts of the Alexandrian school; while to the later centuries of the period intervening between the triumph of Christianity and the invasion of the barbarians belongs St. Augustine's systematic effort to harmonize Christian teaching with the greatest achievements of pagan thought. After the time of St. Augustine, the condition of Christian Europe was not favorable to speculation, and it was not until the dawn of the era of Neo-Latin civilization that in new circumstances, and in a different social and political climate, the schoolmen completed the task begun by the Fathers. Patristic philosophy is fragmentary and devoid of

¹ *De Civ. Dei*, VIII, 12.

² Cf. Stewart, *Boethius* (London, 1891).

unity. It belongs to an epoch in which everything except religion was decadent and in which religion itself, though vigorous, had not yet succeeded in infusing the Christian ideal into the life and thought of Europe. Scholastic philosophy will begin with the opening of the new era; it will grow into the new life of Christianized Europe, and will attain the golden age of its development whenever and wherever the ideal of the Christian life shall have transformed the social and political conditions into an atmosphere most congenial to Christian speculation. The Fathers defined, at least provisionally, the intellectual basis of the dogmatic system of the Church; they protested successfully against the gnostic, which was in reality the rationalistic, subordination of revelation to reason, and they stated the question which Scholastic philosophy took up and answered: How can reason and revelation be shown to be distinct and, at the same time, consistent sources of truth?

SECTION B

SCHOLASTIC PHILOSOPHY

THE centuries which elapsed between the death of St. Augustine and the foundation of the Carolingian schools were centuries of barbarian invasion and barbarian rule; they witnessed the dismemberment of the Roman Empire, the disappearance of the last vestiges of Roman civilization in Europe, and the substitution of a civilization of a new order. During the lifetime of St. Augustine, the West Goths under Alaric besieged and sacked Rome (410). Nineteen years later, the Vandals under Genseric overran Numidia and Mauretania and laid siege to Hippo. Meanwhile the Vandals from the upper Rhine had invaded Gaul, ancient Germany, and Burgundy (407); these invaders were followed (443) by the Burgundians, who settled on the upper Rhone and on the Saône. Later (451) came the Huns under Attila, and last of all, the Franks from the lower Rhine, who, towards the end of the fifth century, spread over Gaul, destroying every trace of civilization that had survived the invasion and occupation of France by the Vandals and the Burgundians. In the same century, the Angles and Saxons took possession of Britain, and the Visigoths established barbarian rule in Spain. In the sixth and seventh centuries the Heruli, the East Goths, and the Lombards destroyed whatever remained of Roman civilization in northern Italy.

We can scarcely realize the desolation that during these centuries reigned throughout what had been the Roman Empire. The condition of France is vividly portrayed by the words of St. Gregory of Tours, who, towards the end of the sixth century,

wrote, "Væ diebus nostris quia periit studium litterarum a nobis,"¹ and by the verdict of the Benedictine authors of *L'histoire littéraire de la France*, that the eighth century was *the darkest, the most ignorant, the most barbarous* that France had ever seen. The utter disregard for learning which characterized those times may be inferred from the fact that Ambrose of Autpert (died 778) was forced to invoke the authority of Pope Stephen III in defense of the study of the Scriptures: "Iniqui multi: non est tempus jam nunc disserendi super Scripturas."²

Although surrounded by all the external signs and conditions of dissolution and decay, the Church remained true to her mission of moral and intellectual enlightenment, drawing the nations to her by the very grandeur of her confidence in her mission of peace, and by the sheer force of her obstinate belief in her own ability to lift the new peoples to a higher spiritual and intellectual life. It was these traits in the character of the Church that especially attracted the barbarian kings. But, though towards the end of the fifth century Clovis became a Christian, it was not until the beginning of the ninth century that the efforts of the Church to reconquer the countries of Europe to civilization began to show visible results. The Merovingian kings—the "do-nothing kings," as they were styled—could scarcely be called civilized. Even Charlemagne, who was the third of the Carolingian dynasty, could hardly write his name.³ Still, Charles, illiterate as he was, realized the necessity of reviving culture and learning throughout his empire. Inspired by this noble purpose, he summoned the Church to his aid, invited learned ecclesiastics to his court, and founded schools which became centers of the new intellectual movement in different parts of Europe. To this movement Scholastic philosophy owes its origin.

¹ *Historia Francorum*, *Præf.*; cf. Migne, *Patr. Lat.*, Vol. LXXI, col. 159.

² Quoted by Hauréau, *Histoire de la philosophie scolastique*, I, 6; cf. Migne, *Patr. Lat.*, Vol. LXXXIX, col. 1268.

³ Cf. Einhard, *apud* Migne, *Patr. Lat.*, Vol. XCVII, coll. 26 ff.

The Scholastic movement, therefore, which dated from the foundation of the Carolingian schools, was from the outset a reaction against the intellectual stupor of the times. The movement was at first confined merely to the restoration of the study of grammar and rhetoric. Later on, dialectic assumed in the schools more importance than it had at first possessed, while an impulse to philosophical speculation was given by the Neoplatonism of Erigena and other Irish teachers. Thus, during the ninth and tenth centuries there were many attempts at forming a system of philosophy, but it was not until the eleventh century, when the problem of universals gave the greatest impulse to the growth of Scholastic dialectic, that these attempts were concentrated into a definite movement. Towards the end of the twelfth century the physical and metaphysical writings of Aristotle became known to the schoolmen and caused that great outburst of intellectual activity which made the thirteenth century the Golden Age of Scholasticism. The middle of the fourteenth century marks the beginning of the decadent movement which, in the following century, ended in the downfall of the Scholastic system.

We have, therefore, the following division :¹

FIRST PERIOD — SCOTUS ERIGENA TO ROSCELIN, from the beginning of the ninth century to the eleventh. — *The Period of Beginnings.*

SECOND PERIOD — ROSCELIN TO ALEXANDER OF HALES, from the rise of the problem of universals to the introduction of the works of Aristotle (1050–1200). — *The Period of Growth.*

THIRD PERIOD — ALEXANDER OF HALES TO OCKAM (1200–1300). — *The Period of Perfection.*

FOURTH PERIOD — FROM THE BIRTH OF OCKAM TO THE TAKING OF CONSTANTINOPLE (1300–1453). — *The Period of Decay.*

¹ This is the division adopted by González, *op. cit.*, II, 116, 117; for various other divisions, cf. Adloch, *Præfationes ad Artis Scholasticæ inter Occidentales Fata* (Brunæ, 1898), pp. 18 ff.

Sources. The neglect of the study of the sources of Scholastic philosophy on the part of some of its historians, and the apparently inexcusable misrepresentation on the part of others, render it imperatively necessary that we keep constantly at hand the *primary sources*, the works of the schoolmen themselves. It is from these works, and from these alone, that the student will learn the true meaning and value of Scholastic philosophy. Many of the writings of the first schoolmen are of easy access, being included in Migne's *Patrologia Latina*. Additional primary sources (*Beiträge zur Geschichte der Philosophie des Mittelalters*, Münster, 1891 ff.) are at present being published by Baumeister and others. The works of the Scholastics after the time of St. Bernard are not included in Migne's *Patrology*; they are, however, published in separate editions, to which attention will be called.

With regard to *secondary authorities*, the list given by Weber (p. 9 of Eng. trans.) will be found complete with the exception of a recent work, De Wulf's *Histoire de la philosophie médiévale* (Louvain, 1900), which is a valuable aid to the study of this period. De Wulf's work does not, however, supersede Stöckl's *Geschichte der Philosophie des Mittelalters*, which is still the standard work of reference, although since its publication (1864-1866) numerous important documents bearing on the history of Scholasticism have been published. It is well for the student to remember that, although Hauréau is referred to as an authority, he owes his distinction as an historian to the care with which he has studied and edited manuscript sources¹ rather than to the accuracy of his appreciations.

Valuable biographical material is to be found in Wetzer und Welte's *Kirchenlexikon*, 12 Bde., 2 Aufl., Freiburg im B., 1886-1901.

¹ Hauréau's *De la philosophie scolastique* was first published in two volumes (Paris, 1850). In 1872 the work was recast, enlarged, and published in three volumes (tome I; tome II, 1^{ère} partie; tome II, 2^{ème} partie) under the title *Histoire de la philosophie scolastique* (Paris, 1872-1880). His *Notices et extraits de quelques MS. latins de la Bibliothèque Nationale* (6 vols., Paris, 1890-1895) is also of great value. Besides, he published many articles of interest to the student of Scholastic philosophy in the *Notices et extraits . . . faisant suite aux notices et extraits lus au comité établi dans l'Académie des Inscriptions et Belles-Lettres*; consult especially the volumes for the years 1888-1890 and also the *Journal des Savants* for the same years. For recent bibliography of the history of Scholastic philosophy, cf. *Archiv f. Gesch. der Phil.*, X, 127 ff. and 247 ff.; *La Revue Neo-Scholastique*, Mai, 1902; *Revue d'histoire et de littérature religieuses*, Sept.-Oct., 1902.

FIRST PERIOD OF SCHOLASTICISM

Erigena to Roscelin (800-1050) — The Period of Beginnings

The Carolingian Schools.¹ In the chronicles and biographies of the Merovingian epoch mention is made of a *Scola Palatina* at the court of Dagobert and of other Merovingian monarchs. It is clear, however, that these schools were institutions for the training of court guards (*bellatores*) in the arts of war and in the manners of the court.² Before the time of Charlemagne the only thing that the Frank was taught was how to fight. The schools which Charlemagne founded were intended to teach the Frank to respect knowledge as well as valor. They were literary schools, in which at first the programme was very elementary, the nobles and clerics who attended being taught merely the arts of reading and writing and the rudiments of grammar. The project of forming these schools seems to have suggested itself to Charlemagne during his sojourn in Italy, where the traditional learning was in part preserved by masters who taught the grammar of Priscian and Donatus, and read the works of Virgil, Cicero, St. Augustine, Boethius, and Cassiodorus. In the famous *Capitulary* of 787 and in other enactments Charles recommended the foundation of the diocesan and monastic schools throughout the empire, having previously founded the *Schola Palatina* at his own court, and given to the abbey of Fulda the capitulary empowering the abbot to establish a school at that monastery.

But although it was Italy that inspired Charles with the idea of founding schools throughout the empire, it was Ireland that sent him the masters who were to impart the new learning. Ireland, which had never formed part of the Roman Empire, and which had escaped the invasions of the barbarians, had preserved since the days of its conversion to Christianity the tradition of ancient learning, a knowledge of Greek and Latin which was now to astonish continental Europe. Alcuin, although an Englishman, is justly considered a representative of Irish learning; with him is associated *Clement* of Ireland, who assisted in the work of founding the palace school. Unfortunately, history has not preserved the names of Clement's fellow-countrymen who, during the reign of Charles and throughout the ninth century, were found in every cathedral and monastery of the empire as well as at the court of the Frankish kings, and were so identified with the

¹ Cf. Mullinger, *Schools of Charles the Great* (London, 1877).

² Cf. *Revue des questions historiques*, Vol. LXI (1897), pp. 420 ff.

new intellectual movement that the teaching of the newly founded schools was characterized as *Irish learning*.¹ Eric of Auxerre (middle of the ninth century), writing to Charles the Bald, testifies to the nationality of many of these pioneers: "Quid Hiberniam memorem, contempto pelagi discrimine, pæne totam cum grege philosophorum ad littora nostra migrantem?"² We find mention of a *Hibernicus exul*, author of a poem in praise of Charles the Great; of *Dungal*, teacher at Pavia; of another (or possibly the same) Dungal who wrote to Charlemagne explaining the eclipse of the sun in 810; and of a *Sedulius Scotus*,³ sometimes identified with the Irish poet *Sedulius*, who was one of the authors most widely read throughout the early Middle Ages. Ireland has, therefore, every claim to be considered the *Ionía* of scholastic philosophy.

After the death of Charles and the subsequent division of the empire, a reaction set in against the schools in several parts of the empire. Lupus Servatus, the celebrated abbot of Ferrières, complains of the opposition on the part of the "ignorant vulgar who, if they detect any fault (in the representatives of the new learning) attribute it, not to human weakness, but to some quality inherent in the studies themselves."⁴ There were some also who, according to Amalarius of Metz,⁵ reproved the reading even of the Scriptures. These reactionaries, however, were silenced by the voice of Eugenius II, who encouraged the foundation of schools and the spread of the new learning.⁶ Supported by the highest authority in the Church, the movement continued under the successors of Charlemagne, so that, during the ninth and tenth centuries, there sprang up besides the palace school, which seems to have accompanied the Frankish court from place to place, the no less celebrated cathedral and monastic schools of *Fulda*

¹ Alcuin, writing (Ep. 82) to Charlemagne, says, "Ego abiens Latinos ibi (at the court) dimisi. Nescio quis subintroduxit Ægyptios" (Migne, *Patr. Lat.*, Vol. C, col. 266). The Irish monks were called Egyptians, as well perhaps on account of their leaning towards Neo-Platonism as because they followed the Alexandrian custom with regard to the Paschal computation.

² Cf. Migne, *Patr. Lat.*, Vol. CXXIV, col. 1133; *Acta Sanctorum Julii*, Vol. VII, p. 233. Consult the chapter entitled *Écoles d'Irlande* in Hauréau's *Singularités*, etc. (Paris, 1861), and Poole, *Illustrations of the History of Medieval Thought* (London, 1884), pp. 9 ff.

³ *Floruit circa* 850; cf. Ebert, *Allgemeine Geschichte der Literatur des Mittelalters* (3 Bde., Leipzig, 2. Aufl., 1889), II, 191 ff.; also, *Cath. Univ. Bull.*, April, 1898 (Vol. IV, pp. 155 ff.).

⁴ Ep. 1^a Lupi, Migne, *Patr. Lat.*, Vol. CXIX, col. 431.

⁵ Migne, *Patr. Lat.*, Vol. CV, col. 1079.

⁶ Cf. Mansi, *Sacrorum Conciliorum Amplissima Collectio*, Vol. XIV, p. 1008.

in Germany, and of *Utrecht, Liège, Tournai*, and *St. Laurent* in the Low Countries. It was in France that the Scholastic movement found its first home, and it was in that country also that, after the temporary opposition of the reactionary alarmists, the most important schools were founded, namely at *Tours, Rheims, Laon, Auxerre*, and *Chartres*. These homes of the new learning were the scene of the first crude attempts of Scholastic speculation, as at a later time the University of Paris was the scene of the last and most brilliant triumphs of Scholasticism.

It would be a mistake to imagine that philosophy was taught in the schools at the beginning. The curriculum of studies at first comprised the seven liberal arts, — that is to say, the *trivium* (grammar, rhetoric, and dialectic) and the *quadrivium* (arithmetic, geometry, astronomy, and music). Little by little, however, the programme was extended. Around the problems of dialectic were grouped problems of metaphysics and psychology, and gradually philosophy became part of the programme of the schools: The *magister scholæ*, or *scholasticus*, as the teacher was called, expounded the text of the author. This was the method employed whether the subject was grammar or dialectic or any other of the seven branches.

The Library of the Schools.¹ 1. Of *Aristotle's works*, the first schoolmen possessed the *De Interpretatione* and, in the tenth century, the *Categoria* in Boethius' translation. It was only in the twelfth century that the first book of the *Analytica Priora*, the *Topica*, and *De Sophisticis Elenchis* became known, and it was not until the thirteenth century that the physical, psychological, and metaphysical treatises were introduced into the schools. These facts explain why during the first and second periods of the Scholastic movement philosophy was almost altogether occupied with logical problems.

2. Of *Plato's dialogues*, the *Timæus* was known to the Irish monks, possibly in the original. It was known on the continent in the translation made in the fifth century by *Chalcidius*. Besides the *Timæus*, the works of St. Augustine and of the Neo-Platonists were used as sources from which the first schoolmen derived their knowledge of Platonism.

3. Of the *commentators of Aristotle*, only *Porphyry*, whose *Isagoge* circulated among the schoolmen in Boethius' translation, and *Boethius*, who commented on the *Categoria* and *De Interpretatione*, were known to the schoolmen of the first period.

4. *Translations and compilations* by *Marius Victorinus* (fourth century), *Macrobius* (fifth century), *Claudianus Mamertus*, and *Donatus* were read and expounded in the schools.

¹ Cf. De Wulf, *op. cit.*, p. 157, and Molinier, *Les manuscrits*, Paris, 1882.

5. The *Neo-Platonic commentaries* of *Apuleius* and *Trismegistus* were also used.

6. Of *Cicero's works*, the rhetorical and dialectical treatises such as the *Topica*, *De Officiis*, etc., were known at least in part. *Seneca's De Beneficiis* and *Lucretius' De Rerum Natura* were also read.

7. In addition to the genuine works of *St. Augustine*, the pseudo-Augustinian treatises, *Categoriae Decem*, *Principia Dialectica*, *Contra Quinque Hæreses*, and *De Spiritu et Anima*, were studied by the first Scholastics.

8. Finally, the library of the first schoolmen included the works of *Clement of Alexandria* and of *Origen* in Latin translations, and the Latin version of *Pseudo-Dionysius* by *Scotus Erigena*, as well as the commentaries and original works of *Martianus Capella*, *Cassiodorus*, and *Boethius*.

CHAPTER XXIV

FIRST MASTERS OF THE SCHOOLS

Alcuin¹ (735–804), educated in the famous school of York, appeared at the court of Charlemagne in 781, and there for eight years taught grammar and dialectic in the palace school. Later he retired to the abbey of Tours, where he founded a school which was soon to eclipse the palace school itself. Alcuin was distinguished chiefly as a grammarian. His contributions to dialectic are of secondary importance; and his psychological treatise *De Animæ Ratione* merely reproduces the doctrines of St. Augustine. His importance in the history of Scholastic philosophy is due to the prominent part which he took in the establishment of the first schools.

Fredegis, who was probably a fellow-countryman of Alcuin, taught at the palace school about the beginning of the ninth century. After Alcuin's death he became abbot of the monastery of Tours.

¹ Cf. Picavet, *Origine de la philosophie scolastique en France et en Allemagne* (brochure); Mullinger, *op. cit.*, pp. 49 ff.

Taking up the problem of the nature of darkness, he proved in a treatise, *De Nihilo et Tenebris*,¹ that both nothing and darkness are real beings. On this point, at least, Fredegis is a realist. He does not, however, discuss the general question of the objective reality of universal ideas.

With Fredegis is associated the unknown author of the treatise entitled *Dicta Candidi de Imagine Dei*.² The work is virtually an attempt at finding in man the image of the Trinity. In spirit and in method it is Augustinian.

Rhabanus Maurus (784–856) is one of the most remarkable of the first masters of the schools. He was born at Mainz in the year 784.³ At the age of eighteen he became a Benedictine monk in the monastery of Fulda. Thence he went to Tours, where for six years he studied under Alcuin. From Tours he returned to Fulda in order to assume the office of teacher. According to Trittenheim, Rhabanus and his new learning were regarded with suspicion by Ratgarus, abbot of the monastery of Fulda. Rhabanus, however, overcame the opposition of the reactionaries.⁴ He was made abbot of Fulda and later became bishop of Mainz. He died in the year 856.

Like Alcuin and Fredegis, Rhabanus is of importance rather as a teacher and inaugurator of the new learning than as an independent philosopher. It was he who introduced the learning of the schools into eastern Germany. In his work *De Universo*⁵ he treats in twenty-two books a variety of subjects,—God, the angels, biblical personages, ecclesiastical institutions, astronomy, chronology, philosophy, poetry, medicine, agriculture, military tactics, and language. The work is a veritable encyclopedia of knowledge. Except in the portions referring

¹ Published by Ahner, *Fredegis von Tours* (Leipzig, 1878).

² Cf. Migne, *Patr. Lat.*, Vol. CI, col. 1359, and Hauréau, *op. cit.*, I, 131 ff.

³ Cf. Tümmel, *Rhabanus Maurus* (Munich, 1900), p. 1, note 5.

⁴ Mullinger, *op. cit.*, p. 140, gives a circumstantial account of this incident.

⁵ *Apud* Migne, *Patr. Lat.*, Vol. CXI.

to chronology and grammar, it is merely a *résumé* of the traditional teaching.

Historical Position. These first masters of the schools belong, with Isidore of Seville and the Venerable Bede, to the *Encyclopedists* of the period of transition between Patristic philosophy and the philosophy of the Middle Ages. They rendered inestimable service to the Scholastic movement by their personal influence as teachers, while by their writings they summarized and helped to popularize the dogmatic and exegetical teachings of the Fathers. The encyclopedic scope of their writings is evidence of a condition of affairs similar to that which existed in the first schools of Greek philosophy. Just as the early Greek philosophers wrote *περὶ φύσεως*, the first schoolmen wrote *De Universo*. There is, however, this difference: that while the philosophical movement in the first schools of Greece was independent of the past, the philosophy of these first schoolmen was virtually an epitome of the doctrines of the Fathers. Erigena was the first of the schoolmen to attempt an independent system of philosophical speculation. With Erigena, therefore, the first period of Scholastic philosophy begins.

CHAPTER XXV

JOHN SCOTUS ERIGENA

Life. John Scotus Erigena, or Ierugena, was born between the years 800 and 815. Ireland was probably the place of his birth.¹ About the middle of the ninth century he appeared at the court of Charles the Bald, by whom he was placed at the head of the palace school. He was ordered by his royal patron to translate the writings of Pseudo-Dionysius and of

¹ The name *Ierugena* (*ιερωδ γενου*) indicates this, as is explained by Dr. Floss in the introduction to his edition of Erigena's works. Cf. Migne, *Patr. Lat.*, Vol. CXXII, Proëm., pp. 19 ff. Cf. also Baeumker in *Jahrbuch für Philosophie und Spekulative Theologie*, Bd. VII, p. 346; Bd. VIII, p. 222. Dr. Baeumker holds that the original form of the name was *Eriugena*.

Maximus Confessor. He is said to have gone to Oxford at the invitation of Alfred the Great, and to have founded a school at Malmesbury, where, according to a tradition by no means reliable, he was put to death by his scholars. These biographical data are, with the exception of his relations with Charles and with the palace school, matters of great uncertainty. There are many reasons for supposing that Erigena was a layman, although Stöckl believes that he was probably a priest.

Sources. Erigena composed, besides the translations of Pseudo-Dionysius and Maximus Confessor, a comprehensive philosophical work, *De Divisione Naturæ*, and a treatise, *De Egressu et Regressu Animæ ad Deum*, of which only a fragment has come down to us. To the predestination controversy which was waged in the ninth century between **Gottschalk**, **Ratramnus**, and **Servatus Lupus**, on the one hand, and **Hincmar**, **Florus**, and **Remi**, archbishop of Rheims, on the other, Erigena contributed a treatise, *De Prædestinatione*, which seems to have given offense to both parties. In the other great controversy of the ninth and the following centuries, the dispute concerning the doctrine of transubstantiation, in which **Ratramnus** and **Berengar** were opposed by **Paschasius Radbertus** and **Lanfranc**, Erigena also took an active part. The work, however, *De Corpore et Sanguine Domini*, which has been ascribed to him, is undoubtedly to be assigned to some other writer of the ninth century, very probably to Ratramnus.¹

Of considerable importance in determining the philosophical views of Erigena are his *Expositiones*, — commentaries on the works of Pseudo-Dionysius, — and the commentary on Martianus Capella, fragments of which were published by Hauréau.² The commentary on the gospel of St. John and the *Homilia in Prolegomenon Evangelii sec. Joannem* are Erigena's contributions to scriptural exegesis.

The works of Erigena as published by Dr. Floss are reprinted in Migne's *Patrologia Latina*, Vol. CXXII. The *De Divisione Naturæ* was first published by Gale (Oxford, 1681). A recent addition to our secondary sources is Alice Gardner's *John the Scot* (London, 1900).

ERIGENA'S PHILOSOPHY

General Idea of Erigena's Philosophy. In its general outlines the philosophy of Erigena is Dionysian, that is to say Neo-Platonic. Erigena carries the union of philosophy and theology

¹ Cf. Migne, *Patr. Lat.*, Vol. CXXII, col. 103.

² Cf. Hauréau, *Hist. de la phil. scol.*, p. 152, n.

to the point of identifying the two sciences. In his work *De Prædestinatione* he quotes St. Augustine as saying :

Non aliam esse philosophiam, id est sapientiæ studium, et aliam religionem, cum ii quorum doctrinam non approbamus nec sacramenta nobiscum communicant.¹

But while Augustine evidently means merely that the speculative aspect of religion is as important as the practical, Erigena understands him to mean that philosophy and religion are one and the same ; for he continues :

Quid est aliud de philosophia tractare nisi veræ religionis, qua summa et principalis omnium rerum causa, Deus, et humiliter colitur et rationabiliter investigatur, regulas exponere? Conficitur inde veram esse philosophiam veram religionem, conversimque veram religionem esse veram philosophiam.²

We have here the characteristic trait of Scholasticism, though in an exaggerated form, — the attempt, namely, to find a rational basis for the union of reason and revelation. Later on the great masters of Scholasticism, while recognizing the union of reason and revelation, will allot to philosophy a sphere of its own, maintaining that faith and science are distinct though perfectly accordant with each other. Thus, St. Thomas would not subscribe to Erigena's methodological principle that the Scripture and the Fathers are sources of proof in philosophy.

The *identification of philosophy with theology* by Erigena is not to be understood as an advocacy of rationalism. It is true that Erigena maintains the priority of reason with respect to authority, as when he says, "Omnis auctoritas quæ vera ratione non approbatur infirma esse videtur."³ But this is a principle common to all the Scholastics. Far from being a rationalist Erigena is more inclined to take sides with the mystics, — to belittle all reason unless in so far as reason is illumined from on

¹ *De Vera Relig.*, Cap. V.

² Migne, *Patr. Lat.*, Vol. CXXII, col. 557.

³ *De Divisione Naturæ*, lib. I, Cap. 71.

high. Instead of rationalizing theology, he would theosophize philosophy.¹

Erigena assigns to philosophy a *fourfold task*: to divide, to define, to demonstrate, and to analyze (*resolutiva*).² This may be described as Erigena's definition of the applicability of dialectic to philosophy and theology,—a notion which, like that of the union of faith and science, is destined to develop in the subsequent growth of Scholastic philosophy.

General Metaphysical Doctrines. The treatise *De Divisione Naturæ* begins with the definition of nature. Nature is "quidquid vel animo percipi potest vel animi intentionem superat." Nature is therefore synonymous with being. The first great division of nature is into things *which are* and things *which are not*. Now, there are five ways in which a thing may be said *not to be*.³

1. A thing is not in the sense that it *cannot be known*. "Quæ per excellentiam suæ naturæ omnem sensum, intellectum rationemque fugiunt, jure videri non esse." In this sense God and the essences of things are non-existent.

2. A thing is not, *relatively to something else*, in the sense that, being what it is, it is not that which is higher. "Inferioris affirmatio superioris est negatio: inferioris negatio est superioris affirmatio." Thus, a plant is not, because it is not an animal, and in like manner every being is relatively not-being.

3. A thing is not when it is in mere *potency*. "Quæ vero adhuc in naturæ sinibus continentur nec in formata materia apparent . . . dicimus non esse." Erigena adduces the example of the human race potentially constituted by God in the first man.

4. A thing is not *in reference to the intellect*, when it is enveloped, as it were, in material conditions. "Quæ locorum

¹ Cf. *Cath. Univ. Bull.*, July, 1897 (Vol. III, pp. 338 ff.).

² *De Prædestinatione*, Cap. 1.

³ *De Div. Nat.*, Lib. I, Capp. 3 ff.

spatiis temporumque notibus variantur, colliguntur, solvuntur, vere dicuntur non esse."

5. Finally, there is a mode of not-being which is peculiar to man. Man's being is the imaged beauty and holiness of God. When, by sin, he loses this dignity, destroying the image of God which is in him, man ceases to exist: he *is not*.

Leaving this fivefold enumeration of the modes of not-being, we come to the celebrated division of nature into (1) *Natura quæ creat et non creatur*; (2) *Natura quæ creatur et creat*; (3) *Natura quæ creatur et non creat*; and (4) *Natura quæ nec creatur nec creat*.

1. *Natura quæ creat et non creatur* is God, the origin, principle, and source of all things. True to the tenets of the Dionysian philosophy, Erigena denies that God can know Himself. God is incomprehensible to Himself as He is to us. For, to know Himself, He should place Himself in one of the categories of thought, and that is impossible.

In discussing the possibility of our knowing God, Erigena dwells on the twofold theory of *theological predication*. There is the *affirmative* theory, which says that substance, goodness, and so forth may be affirmed of God; and there is the *negative* theory, which maintains that all these predicates should be denied. The truth, according to Erigena, is that these predicates may be affirmed of the Supreme Being if they are taken in a metaphorical sense; in their proper, or literal, meaning they must be denied, because God is *more than substance, more than goodness*. Thus, though in speech we affirm these and other predicates, in thought we deny them: "in pronunciatione est forma καταφατική, in intellectu autem ἀποφατική."¹ It is remarkable how much the first and most daring of the schoolmen is willing to concede to agnosticism.

What is said of predicates of God in general is true also of the term *Creator*. God and the action by which He made things

¹ *De Div. Nat.*, Lib. I, Cap. 17.

are one. When, therefore, we say that God is Creator, we mean, according to Erigena, that He is more than Creator, that He is in all things as their sole substance.

Cum ergo audimus Deum omnia facere nil aliud debemus intelligere quam Deum in omnibus esse, hoc est, essentiam omnium subsistere. Ipse enim solus per se vere est, et omne quod vere in his quæ sunt dicitur esse ipse solus est.¹

This *pantheism* is professed over and over again, as, for example, "Deus namque omnium essentia est, quia solus vere est,"² and the oft-quoted formula of Pseudo-Dionysius, "Esse omnium est superesse Divinitatis." It is true that Erigena sometimes speaks of God as separate from creatures: "Ipse Deus in se ipso ultra omnem creaturam nullo intellectu comprehenditur"; and again, "Deus non est totum creaturæ, neque creatura pars Dei."³ Nevertheless, we cannot, without accusing Erigena of self-contradiction, attach any philosophical value to these expressions; they are merely the incidental use of common modes of speech. For Erigena certainly maintained that the being of creatures is the being of God, and that by creation God *becomes* His creatures. This consideration leads to the next division.

2. *Natura quæ creatur et creat.* By this our philosopher understands God as containing in the Word (Logos) the *primordial causes, or types*, of things, formed before all creation.

Pater, *i.e.*, omnium principium, in Verbo suo, Unigenito videlicet Filio, omnium rerum rationes quas faciendas esse voluit priusquam res fierent præformavit.⁴

There is no hierarchy among these types as there was among the Platonic Ideas; still, Erigena, following Pseudo-Dionysius, enumerates ten first primordial causes.

These types are in God. Consequently, they are intelligent, understanding themselves and understanding the things of which

¹ *Op. cit.*, Cap. 72.

³ *Op. cit.*, I, 3, 7, and II, 1.

² *Op. cit.*, Cap. 3.

⁴ *Op. cit.*, II, 2.

they are types. They are indeed made, but made from all eternity; for they are coeternal with God. Of this coeternity, however, Erigena is not altogether certain. The primordial causes proceeded from the Father by a process which is figuratively described as a *flowing*.¹

We must be careful not to conclude too hastily, as has sometimes been done, that Erigena identified the primordial causes—the world of Ideas—with the Second Person of the Blessed Trinity. The Son is begotten from all eternity. From all eternity, too, the primordial causes were made; they are in the Son, of the same substance as the Father, yet, as the defenders of Erigena have conclusively shown, they are not the Son.²

Here, as well as in his treatment of the first division of nature, Erigena's pantheism is apparent. He maintains that by the emanation, or flowing, of the ideas from God, the divine nature creates itself. "Creatur enim a seipsa in primordialibus causis ac per hoc seipsam creat."³ He goes on, however, to explain that the creation in this case consists in a showing forth (*theophania*) of the divine nature.

3. *Natura quæ creatur et non creat* means the world of phenomena, things subject to change and to the conditions of time and space: "quæ in generatione temporibusque et locis cognoscuntur, hoc est in primordialium causarum effectibus extremis."⁴ Individual things—creatures, as we call them—are derived from God; they participate in the divine nature, for *all derivation is participation*. Now, the order of derivation is from the Father to the primordial causes, and from these to concrete individual existences. In the Word, which is the *locus* of the primordial causes, all things are in a condition of comparative undifferentiation; but when they issue forth from the Word to

¹ Cf. *op. cit.*, III, 4.

² Schlueter and Görres hold opposite views on this question of interpretation (cf. Migne, *Patr. Lat.*, Vol. CXXII, col. 63).

³ *De Div. Nat.*, III, 23.

⁴ *Op. cit.*, I, 1, and IV, 1.

become the complex world of concrete things, they suffer separation, differentiation, and multiplicity. Our philosopher illustrates his thought by referring to the radii of a circle : at the center all the radii are united, but as they proceed towards the circumference they become distinct and separate.¹ The separation of the primordial causes is the work of the Holy Spirit,—of the Spirit who in the beginning moved over the face of the waters.²

The derivation of things proceeded in definite order through the highest genera, lower genera, intermediate species, and special species to the individual. Thus did Erigena hypostatize, as it were, the categories and lay down the principle of the most rigorous realism,—that the categories of Thought and Being exist outside the mind in all their universality.

We may, then, describe the process of the origin of things as an emanation, or flowing, from the first principle of existence. Erigena calls the process a *theophania*, or showing forth of the divine nature ; and it is in this sense that the supreme principle of existence pervades or *runs* through all nature ; for *θεός* is derived from *θέω* (to run). Creation, in the common acceptance of the term, does not apply to the origin of things ; yet, since God made all things out of His own substance, and since, in the meaning already described, He is non-existent, He may be said to have made all things *ex nihilo*.³

4. The fourth division of nature is *Natura quæ nec creatur nec creat*. This is *God as the end of all things*, the goal to which all created beings must return. Everywhere in the universe Erigena finds traces or signs of the final return of creatures to the Creator. The heavenly sphere is constantly returning to the point where it was twenty-four hours previously ; in four years the sun completes its course in the celestial circle, returning to the point whence it started ; there is a period set for the return of the flowers and leaves and herbs. And so all creatures at the completion of the cosmic cycle will

¹ *Op. cit.*, III, 1.

² *Op. cit.*, II, 36.

³ *Op. cit.*, III, 19.

return to the Principle whence they came. This is especially true of man; for the life of man on earth is but a striving after the true, the beautiful, the good, the perfect, from which he came, and to which he must return ere he can find rest.¹ God, who revealed Himself in creation, will retire within Himself in the final ἀποκατάστασις, or universal return of creature to Creator.

Just as creatures emanated from God according to definite order, so shall they return to Him in order, the lower through the higher. As air is changed into light and metal into fire, so shall bodily substance be changed into soul; and, in like manner, whatever is inferior shall rise through higher forms to God.² This doctrine of Erigena on the one hand reminds us of the Heraclitean doctrine of the upward and downward way, and on the other hand suggests the Hegelian theory of divine processes.

Problem of Universals. Although the problem of universals was not proposed to the Scholastics of Erigena's day, our philosopher treats incidentally of the existence of the categories, and, placing himself on the side of the extreme realists, affirms the objective reality of the highest genera as well as of the individual. Indeed, he goes farther than the Platonic realists, when, not content with affirming the logical unity of the concept of Being, he attributes to Being objective or ontological unity, affirming that Being is one.³

Erigena's Psychological Doctrines do not occupy an important place in his system of thought. He divides the cognitive powers of the mind into *sensible* and *supersensible*. The sense-faculty is one, the so-called five senses being merely the different organs which the sense employs.⁴ The higher, or supersensible, faculties are threefold, imaging the Trinity: the first is *intellect* (νοῦς), by which the mind contemplates God, the source and author of all things; the second is *reason* (λόγος), by

¹ *Op. cit.*, IV, 26 ff.

² *Op. cit.*, V, 39.

³ Cf. commentary on Martianus Capella, *apud* Hauréau, *op. cit.*, I, 172, and *De Div. Nat.*, *passim*.

⁴ *Op. cit.*, II, 23.

which the mind contemplates the primordial causes in the Word; the third is *internal sense* (*διάνοια*), by which the mind attains a knowledge of the world of phenomena: "circa effectus causarum primordialium, sive visibiles sive invisibiles sint, circumvolvitur."¹ Now, while these three are merely phases of the soul, the first is properly the essential nature of the soul, the second is a power (*δύναμις*), and the third is a kind of *ἐνέργεια*, or actuality of the soul. The evolution, or march, of knowledge is twofold: *from the higher to the lower*, that is, from an intuitive knowledge of God (*gnostico intuitu*) to a knowledge of primordial causes, and thence to a knowledge of concrete things; *and from the lower to the higher*, that is from sense-experience to the internal sense which abstracts the specific and generic concepts, and thence through a knowledge of primordial causes to a knowledge of God Himself. The descending march of knowledge corresponds to the origin of things from God; the ascending march corresponds to the return of things to God. Thus, in his theory of knowledge Erigena is inclined to admit Aristotelian as well as Neo-Platonic principles. He is, however, in final analysis a Neo-Platonist, for he teaches that the knowledge which most avails is knowledge of which the origin and starting-point is God Himself.²

With regard to *self-knowledge*, the soul can know its own *existence* but not its *essence*. And herein the soul is most like to God, for of God we can know merely *that* He is, not *what* He is.³ The reason adduced in proof of the soul's inability to know itself is interesting. A definition, our philosopher argues, is a place; but the containing is greater than the contained. If, therefore, the soul could define itself, it should be greater than itself, which is manifestly absurd.⁴

Anthropological Doctrines. Man is composed of body and soul: "Homo autem corpus et anima est."⁵ The soul is a simple

¹ *Op. cit.*, II, 22.

² *Op. cit.*, II, 27.

³ *Op. cit.*, III, 36.

⁴ *Cf. op. cit.*, II, 23.

⁵ *Op. cit.*, I, 43.

spiritual substance: it is the principle of life. Moreover, *the soul creates the body*.

Anima corpus suum ipsa creat non tamen de nihilo sed de aliquo. Anima namque incorporales qualitates in unum conglutinante, et quasi quoddam subjectum ipsis qualitatibus ex quantitate sumente, et supponente, corpus sibi creat.¹

The essence of the soul, as we have seen, is intellect. Its essential nature includes will also: "Tota animæ natura voluntas est."² In fact, will and intellect are indissolubly associated: "Ubi rationabilitas ibi necessario libertas."³

In *the first man*, who was created in a state of happiness and lived a life like to that of the angels, were contained *in sola possibilitate* all his successors. "Simul ac semel in illo uno homine omnium hominum rationes secundum corpus et animam creatæ sunt."⁴ This postulate being granted, it was easy for Erigena to explain the transmission of original sin.

Historical Position. When we come to form an estimate of Erigena as a philosopher, we must not allow his many brilliant qualities to blind us as to the enormity of his errors. He was, without doubt, the most learned man of his century, he was the first of the representatives of the new learning to attempt a system of constructive thought, and he brought to his task a truly Celtic wealth of imagination and a spiritual force which lifted him above the plane of his contemporaries,—mere epitomizers and commentators. His philosophy has all the charm which pantheism always possesses for a certain class of minds. It is subtle, vague, and poetic. When we come to examine its contents and method, we find that it is dominated by the spirit of Neo-Platonism. Through the works of Pseudo-Dionysius and of Maximus, Erigena made acquaintance with the teachings of Plotinus and Proclus; and when he came to construct his own system of thought, he reproduced the essential traits of

¹ *Op. cit.*, II, 24.

² *De Præd.*, Cap. 8, note 2.

³ *Ibid.*, note 5.

⁴ *De Div. Nat.*, II, 25.

Neo-Platonic philosophy, — pantheism, the doctrine of intuition, mysticism, and universal redemption.

The work *De Divisione Naturæ* was condemned in 1225. Its heterodoxy is undeniable; yet we cannot doubt the sincerity of Erigena's devotion to the truth of Catholic dogma. He was, as Anastasius the Roman librarian described him, "vir per omnia sanctus." Perhaps his attitude towards dogmatic truth is best described in the words of Gale, who first published the *De Divisione Naturæ*: "Potuit ergo errare; hæreticus esse noluit."

Erigena illustrates the many-sidedness of the Scholastic movement. To classify as anti-Scholastic whatever does not agree with the synthetic systems of the great masters of Scholasticism is to break the line of continuous historical development which led through the failures and partial successes of Erigena, Abelard, and other philosophers to the philosophy of the thirteenth century. Scholasticism in its final form is the outcome of the forces of Christian civilization which, in different conditions and in less favorable circumstances, produced the imperfect Scholasticism of the period of beginnings and the period of growth.

CHAPTER XXVI

GERBERT

Life. Gerbert was born in Aquitaine, about the middle of the tenth century. He became a monk at the monastery of Aurillac, and there, according to Richer, a contemporary and disciple, he met the count of Barcelona, with whom he went to Spain in order to study mathematics and the physical sciences. Thence, at the request of Otho II, he went to Rome. From Rome he went back to France, and in 991 became archbishop of Rheims. In 997 he was transferred to the see of Ravenna. In 999 he became pope, taking the name of Sylvester II. He lived until 1003.

Gerbert is credited with being the first to introduce the Arabic numerals into Christian Europe.¹ He is said also to have constructed clocks and other

¹ On the use of Arabic numerals by Boethius, cf. Lavisé et Rambaud, *Histoire générale du IV^e siècle à nos jours* (Paris, 1896), Vol. I, p. 785, n.

mechanical contrivances. It was probably his acquaintance with astronomy and his success as a mechanical inventor that earned for him the reputation of magician. The legends collected and published by Benno in the eleventh century represent Gerbert as in league with the devil. The less ignorant, however, among Gerbert's contemporaries acknowledged him to be a pious monk and a man of extraordinary learning.

Sources. Migne, in his *Patrologia Latina*, Vol. CXXXIX, publishes the following works of Gerbert: *Libellus de Numerorum Divisione*; *De Geometria*; *De Sphaerae Constructione*; and *Libellus de Rationali et Ratione Uti*. Gerbert's letters were published by Masson in 1611, and republished by Duchesne in 1636. Richer's *Histories*, which throw so much light on the life and character of Gerbert as well as on some important points of his doctrine, were first published by Pertz in the *Monumenta Germaniae*.¹ To these sources must be added a poem by Adalbero, published in the *Patrologia Latina*, Vol. CXXI, and a letter of Leo, abbot and papal legate, which is found in Vol. CXXXIX of the *Patrologia Latina*. The work *De Corpore et Sanguine Domini*, attributed to Gerbert by Pertz and others, is of doubtful authenticity.

An excellent monograph of the life and teaching of Gerbert is M. Picavet's *Gerbert, un pape philosophe* (Paris, 1897). Cf. *Catholic University Bulletin*, Vol. IV, pp. 295 ff. (July, 1898).

DOCTRINES

Gerbert as a Teacher. In the midst of the wars and other external circumstances which combined to bring about a state of almost universal neglect of learning, Gerbert revived at the school of Rheims the best traditions of the early days of the Scholastic movement. He taught the dialectic of Aristotle, using a translation of the *Categoriæ* in addition to the *Isagogæ* of Porphyry and the commentaries of Boethius. He also taught rhetoric, employing, it is said, a mechanical contrivance in order to express the different combinations of figures of speech, and in one of his letters he speaks of a sphere by means

¹ Richer's *Histories* are published by Migne (*juxta* Pertz), *Patr. Lat.*, Vol. CXXXVIII, coll. 17-170. For bibliography cf. Potthast, *Wegweiser durch die Geschichtswerke des Europäischen Mittelalters*, p. 501.

of which he illustrated "the horizon and the beauties of the heavens." His work *De Divisione Numerorum* shows that he occupied himself with the task of popularizing the theory of multiplication.

Gerbert as a Philosopher. 1. Richer, a contemporary and disciple of Gerbert, gives a most interesting description of an encounter which took place at Ravenna in the year 980 between Gerbert, master of the schools at Rheims, and Otric, the most famous of the masters of the German schools. The Emperor, Otho II, and many distinguished prelates lent solemnity to the scene by their presence. Gerbert opened the discussion by defining philosophy as "divinarum et humanarum rerum comprehensio veritatis," thus identifying philosophy with knowledge. Then he proceeded to divide philosophy into theoretical and practical. He further distinguished physics, mathematics, and theology (*theologia intellectibilis*) as parts of theoretical philosophy, and moral (*dispensativa*), economic (*distributiva*), and political (*civilis*) philosophy as subdivisions of practical philosophy. After a discussion as to the place which physiology and philology should occupy in this classification of philosophical sciences, the disputants passed on to the question, "What is the *aim of philosophy?*" Gerbert answered that the final cause of philosophical study is a knowledge of things human and divine,—in other words, that philosophy is, so to speak, its own reward. At this point the argument veered round to the Platonic account of *the cause of the world*. Next the disputants took up the discussion of the cause of shadows, and when, at the close of the day's debate, the Emperor put an end to the disputation, the question under discussion was whether *mortal* is to be subordinate to *rational* or *vice versa*, or, as we should say, whether the term *mortal* or the term *rational* has the greater extension.

2. The *Libellus de Rationali et Ratione Uti*, addressed to the Emperor, takes up *the problem of predication* at the point where

the oral discussion had been interrupted, and inquires whether *ratione uti* should be predicated of *rationale*. It was a principle admitted by dialecticians that the predicate should possess wider extension than the subject; since, therefore, *reasonable* is of wider extension than *using reason*, is not Porphyry wrong when he says that *using reason* may be predicated of *reasonable*? Gerbert approaches the problem by stating the objections which may be urged from three sources, namely, from the relation of *power* to *act*, from the relation of the *accidental* to the *substantial*, and from the relation of the *higher concept* to the *lower*. He then proceeds to elucidate these notions, determining the nature of act and power, thus using the objections in order to throw light on the problem, so that when he comes to the thesis that *ratione uti* may be predicated of *rationale* he has no difficulty in proving his proposition by the use of the concepts, act, power, etc., on which the objections rested.

This little treatise is, therefore, the first sample of the use of the *Scholastic method*, which, a century later, was employed in Abelard's *Sic et Non*, and was perfected by the philosophers of the thirteenth century. It is by reason of its method rather than of its contents that the treatise occupies so important a place in the history of Scholastic philosophy.

3. *Adalbero*, who was at one time a disciple of Gerbert at Rheims, and who died in 1030, mentions in a poem addressed to Robert II of France certain theories concerning the origin of the universe and adds, "I found these things, being not unmindful of what I have heard." If the theories in question are those of Gerbert, and it is natural to suppose that Adalbero is speaking of his former teacher, it is evident that our philosopher did not confine his philosophical teaching to the problems of dialectic, but that he carried his inquiries into the region of cosmogony and anthropology.

4. The letter of Leo, the papal legate appointed to inquire into the rival claims of Gerbert and Arnoulf to the see of Rheims,

bears further testimony to the many-sidedness of Gerbert's teaching. It implies that Gerbert included in his curriculum *the study of nature* and, perhaps, the study of animal life. This is all the more remarkable when we recall that Gerbert belonged to an age to which Aristotle's treatises on the natural sciences were completely unknown.

Historical Position. Gerbert must have exercised considerable influence on his own generation. The very grotesqueness of the notions which the superstitious entertained concerning him is proof of his preëminence. He is in the tenth century what Erigena was in the ninth and what Abelard will be in the twelfth. His influence, however, was exercised by his oral teaching rather than by his written works. To his disciples, and to the masters who succeeded him in the schools in France, the dialectical movement which was continued by Roscelin, Abelard, and St. Anselm, and by them transmitted to the thirteenth century, owes a larger debt than can be accurately determined.

CHAPTER XXVII

THE SCHOOL OF AUXERRE

ERIC (HEIRICUS) OF AUXERRE

Life. St. Eric (841-881?), a monk of St. Germain of Auxerre, studied at Fulda, where he had for teacher Haimo, the successor of Rhabanus, and afterwards at Ferrières, where Servatus Lupus, who was also a disciple of Rhabanus, was at that time master. After returning to Auxerre, Eric became master in the monastic school of that place, and under his guidance the school became one of the most renowned in all France.

Sources. Hauréau¹ has shown that the marginal glosses found in manuscript, No. 1108, of the National Library of Paris are the work of Eric. The manuscript contains the *Categoriæ Decem* (falsely attributed to St. Augustine), the *Perihermenias* of Aristotle, the *Isagoge* of Porphyry, and several works of Boethius. Naturally, therefore, the glosses added by Eric deal

¹ *Op. cit.*, I, 185.

almost exclusively with logical or dialectical problems. In addition to this document, Hauréau mentions a poem by Eric on the life of St. Germain, to which the author attached, as a marginal note, an extract from Erigena's treatise *De Divisione Naturæ*. The poem is published by Migne, *Patr. Lat.*, Vol. CXXIX.

DOCTRINES

Eric affirms with Aristotle and Boethius that the concept is the image of the object, while the word is the expression of the concept. "Rem concipit intellectus, intellectum voces designant, voces autem litteræ significant." With regard to the *universal* (generic and specific) *concept*, he expresses himself as follows:

Genus non prædicari (de animali) secundum rem (id est substantiam) sed designativum esse nomen animalis quo designatur animal de pluribus specie differentibus dici. Namque neque rationem animalis potest habere genus, cum dicitur animal est substantia animata et sensibilis. Similiter, neque species dicitur de homine secundum id quod significat, sed juxta illud quod de numero differentibus prædicatur.¹

This passage indicates a departure from the realistic view and a leaning towards the nominalism which appeared in more definite form in the eleventh century. In a similar spirit Eric accounts for the collocation of individual things in genera and species, and even in the highest genus, *ousia*.² In Eric's glosses there are several indications of an acquaintance with the writings of Erigena. His doctrines may be described in general as a protest against the extreme realism of his predecessor.

REMI OF AUXERRE

Life. St. Remi (Remigius) of Auxerre was a monk of the abbey of St. Germain of Auxerre. He had for teacher Eric of Auxerre and Servatus Lupus. After the death of Eric he taught at Auxerre, Rheims, and Paris. At the last-mentioned school he had for disciple Otho of Cluny. He died in 904.

¹ Quoted from the manuscript by Hauréau, *op. cit.*, I, 192.

² *Ibid.*, 194.

Sources. Besides a theological treatise entitled *Enarrationes in Psalmos*, we possess Remi's *Glosses* on the grammatical works of Priscian and Donatus and a dialectical commentary, entitled *Commentum Magistri Remigii super Librum Martiani Capellæ de Nuptiis Mercurii et Philologia et super Septem Artes Liberales*. As a secondary source we have the biography of Otho of Cluny by the monk John.¹

DOCTRINES

From the commentary on Martianus Capella it appears that Remi attempted to *reconcile the extreme realism of Eriгена with the anti-realism of Eric*. Martianus Capella had defined genus as "multarum formarum per unum nomen complexio." Eriгена, on the contrary, had defined it as "multarum formarum substantialis unitas." The definition given by Remi is evidently a compromise. "Genus est complexio, id est adlectio et comprehensio, multarum formarum."²

Remi seems to have occupied himself with the problem of the *world of Ideas*. The Ideas, he maintained, exist in an invisible sphere, hidden in the mind of God.

Per sphæram (Martianus) vult intelligi mundum invisibilem qui in mente Dei latebat antequam iste visibilis per varias produceretur causas; quem mundum, id est invisibilem, philosophi vocant ideas, id est formas.³

Associated with the school of Auxerre is the unknown author of another *Commentary on Martianus Capella*. This commentary, on account of the frequent occurrence of Greek words, is judged by some to be the work of an Irish monk.

Mention must also be made of a work entitled *Glosses on the Isagoge of Porphyry*, discovered by Cousin and by him assigned to the ninth century. Both Cousin and Hauréau attribute the work to Rhabanus Maurus; Prantl, Kaulich, and Stöckl are of opinion that it should be assigned to a pupil of Rhabanus who

¹ Cf. Hauréau, *op. cit.*, I, 202.

² *Ibid.*, 203.

³ *Ibid.*, 205.

is called *Iepa*.¹ On the question of universals the author of the *Glosses* propounds certain realistic principles which approach more closely to what afterwards became known as Thomistic realism than do any of the tenets of the other dialecticians of the ninth or tenth centuries.

Genus et species subsistunt alio modo, intelliguntur alio. Et sunt incorporalia; sed sensibilibus juncta subsistunt in sensibilibus, et tunc est singulare; intelliguntur ut ipsa substantia, ut non in aliis esse suum habentia, et tunc est universale.²

Retrospect. During the ninth and tenth centuries the philosophy which formed part of the general intellectual movement inaugurated by the foundation of the schools was still in its beginnings. Here and there different springs gave rise to different streams of thought, but it was not until the following century that these streams began to flow in a common channel, and the philosophy of the schools, uniting all its tributaries, took a definite course, the direction of which may be easily traced. Rhabanus, Erigena, Gerbert, and the monks of Auxerre are practically independent of one another; yet each in his own way exhibits the essential traits of the Scholastic, vague and ill-defined as these traits are, when compared with the characteristics of the Scholasticism of the thirteenth century. All these philosophers agree in maintaining that there is no contradiction between philosophy and theology; they hold that dialectic should be applied to the great problems of human thought; and they all attempt, on a more or less restricted scale, to make faith reasonable. Scholasticism in the ninth century draws the first rough sketch of what Scholasticism in the thirteenth century will be.

This period is generally described as "an age of blind realism"; but it is far from being so. True it is that Erigena's

¹ Poole (*Illustrations of History of Medieval Thought*, p. 337) shows that in the line *Iepa hunc scripsi glossans utcunque libellum*, the word *Iepa* is an interpolation.

² Cousin, *Ouvrages inédits d'Abélard*, LXXXII.

philosophy, the most ambitious constructive attempt of the ninth century, is based on the realistic concept of the universe; but it must be remembered that Erigena's realism did not go uncontradicted, and while Eric, Remi, and the author of the *Glosses* did not succeed in finding the formula best fitted to express the doctrine of moderate realism, they refused with unmistakable emphasis to accept the ultra-realistic concept. It was through the storm and stress of the age of Roscelin and Abelard that moderate realism struggled to an adequate expression. In that age, too, there first appeared rationalism, which, in a sense to be subsequently explained, is regarded by Cardinal González as an essential phase of the Scholastic movement. The occasion of the extraordinary intellectual activity of the second period of Scholasticism was the *problem of universals*.

SECOND PERIOD OF SCHOLASTICISM

Roscelin to Alexander of Hales (1050-1200)

The Problem of Universals. In the *Isagoge* of Porphyry, translated by Boethius, which until the thirteenth century was the common text-book of logic in the schools, the following passage occurs :

Mox de generibus et speciebus, illud quidem sive subsistant, sive in solis nudis intellectibus posita sint, sive subsistentia corporalia sint an incorporalia, et utrum separata a sensibilibus an in sensibilibus posita et circa hæc consistentia, *dicere recusabo* : altissimum enim negotium est hujusmodi et majoris egens inquisitionis.¹

This passage, which thrust the problem of universals on the philosophers of the Middle Ages, proposes three questions: (1) Do the universals (generic and specific concepts) exist in the world of reality, or are they merely things of the mind

¹ Cf. Migne, *Patr. Lat.*, Vol. LXIX, col. 82.

(*nuda intellecta*)? (2) If they do exist outside the mind, are they corporeal or incorporeal? (3) Do they exist *in* concrete sensible things or *outside* them? The *dicere recusabo* of Porphyry was a direct challenge to the schoolmen. Boethius in one of his commentaries had asserted the objective reality of universals, although in another commentary he had spoken as if he held that they are merely things of the mind.¹ The early schoolmen were, therefore, thrown upon their own resources. Not having yet developed an adequate system of psychology, they were obliged to be content with an imperfect, and what may be called a provisional, solution of Porphyry's questions. Little by little, however, the problem of universals suggested questions of psychology and metaphysics, so that while it is incorrect to represent all Scholastic philosophy as centering around the problem of universals, it is true that it was this problem that occasioned the growth from the primitive form of Scholasticism to the Scholasticism of the age of perfection, although there were, as we shall see, other factors which contributed to this development.

The answers to Porphyry's questions are generally classed under three heads: *nominalism*, *conceptualism*, and *realism*. Nominalism maintains that there is no universality either of concept or of objective reality, — the only universality being that of the name. Conceptualism concedes the universality of the idea, but denies that there is a ^{universality of things} universality of things corresponding to the universality of the mental representation. Realism, in its exaggerated form, maintains that the universal *as such* exists outside the mind, — in other words, that there are objective realities which, independently of our minds, possess universality; realism, in its moderate form, known as Aristotelian, or Thomistic, realism, while it grants that there is in things an objective, potentially universal reality, contends that the formal aspect of universality is conferred by the mind, and

¹ Cf. Migne, *Patr. Lat.*, *loc. cit.*; De Wulf, *op. cit.*, p. 170.

that consequently the universal in the full panoply of its universality exists in the mind alone, having, however, a *fundamentum in re*. The formula which came to be the recognized watchword of the nominalist and conceptualist is *universalia post rem*; the formula of exaggerated realism is *universalia ante rem*. Moderate realism, in the spirit of true synthesis, maintained *universalia ante rem* (the types of things existing in the mind of God), *universalia post rem* (concepts existing in the human mind), and *universalia in re* (the potentially universal essences existing in things).

In the first period of Scholastic philosophy Erigena and Fredegis advocated the exaggerated form of realism. The reason of this is not far to seek. The doctrine accorded with the pantheistic spirit of Erigena's philosophy; it offered the most obvious solution of certain dogmatic problems, such as that concerning the transmission of original sin; and its assumption of the perfect correspondence of mental representations with external things commended it to the uncritical spirit of an age of beginnings. It was for lack of a developed system of psychology that the age demanded a categorical answer to the question, Do universals exist outside the mind? When, therefore, Eric and others deny the objective existence of universals, they are to be classed not as nominalists or conceptualists, but merely as anti-realists, for, though they endeavor to find a positive answer to the question, *How do universals exist?* their solution of the problem is to be considered in its negative rather than in its positive aspect. Nominalism and conceptualism did not appear until the second period of Scholastic philosophy, and even then the treatment of the problem of universals was dialectical rather than psychological.¹

It cannot be denied that some of the problems discussed by the later schoolmen were of a frivolous character; it is, however, a serious mistake to describe the problem of universals

¹ Cf. *Archiv f. Gesch. der Phil.*, Bd IX (1896), Heft 4.

as a barren dispute, a controversy about over-refined subtleties. The denial of the universal means ^{intellectualism} sensism, and leads incidentally to the denial of the abstractive power of the human mind. Moreover, the universal has its ethical as well as its psychological aspect, and the denial of the universal means ultimately the destruction of moral ideas and the subversion of the stability of moral principles. Consequently, the schoolmen are to be admired, not blamed, for attaching so much importance to the problem of universals. It is interesting to note that it was this problem that developed the Scholastic method, brought out the element of rationalism latent in Scholasticism, and led, as has been remarked, to the growth of Scholastic psychology and metaphysics.

✓ CHAPTER XXVIII

PREDECESSORS OF ROSCELIN

Besides the anti-realists, Eric, Remi, etc., there were, before the days of Roscelin, dialecticians who opposed the prevailing spirit of realism. Du Boulay¹ mentions a certain "*Joannes qui eamdem artem sophisticam vocalem esse disseruit.*" The authors of *L'Histoire littéraire de la France* speak of the same teacher as *Joannes Sophista*. Oudin and Kaulich believe that Du Boulay refers to Erigena. It is more probable that the *Joannes* referred to is John the Deaf, otherwise called John the Physician.

Herman, abbot of Tournai, writing in the first half of the twelfth century, says that in 1100 Raimbert of Lille and many others taught dialectic nominalistically. It is impossible that the school of Roscelin could have grown to such dimensions within half a century of its birth. Consequently, Roscelin must have had predecessors in the teaching of nominalism; he was not the founder of the system but rather its first great expounder and defender.

¹ *Historia Universitatis Parisiensis*, I, 443.

CHAPTER XXIX

ROSCELIN

Life. Roscelin of Compiègne was born either at Compiègne, or as is more probable, in lower Brittany, about the middle of the eleventh century. He studied at Soissons and at Rheims. In 1098 he became canon of Compiègne and taught in that city, and later at Besançon and at Tours. Among his many disciples was Abelard. On account of the great number of those who flocked to hear him and partly also on account of the development which he gave to Aristotle's dialectical doctrines, Roscelin was styled *Novi Lycae Conditor*. He died about 1100.

Sources. It appears that Roscelin did not commit his doctrines to writing, contenting himself with promulgating and defending them orally. There has come down to us, however, a letter addressed by him to Abelard¹ dealing chiefly with Roscelin's Trinitarian doctrine. Apart from this document we have no sources of information except the statements of *Anselm*, *Abelard*, and *John of Salisbury*, who were Roscelin's opponents. Monograph: M. Picavet, *Roscelin d'après la légende et d'après l'histoire* (Paris, 1896).

DOCTRINES

From the sources mentioned in the preceding paragraph we derive the following points of doctrine:

1. Roscelin taught that universals are mere *flatus vocis*. Anselm² says: "Illi utique nostri temporis dialectici, imo dialectice hæretici, qui nonnisi flatum vocis putant universales substantias" John of Salisbury refers the same opinion to Roscelin by name: "Alius ergo, consistit in vocibus, licet hæc opinio cum Rucelino suo omnino jam evanuerit."³ From these passages we infer that Roscelin was a nominalist, although the expression *flatus vocis* is obviously the phrase used by his opponents rather than by Roscelin himself to describe his doctrine.

¹ Migne, *Patr. Lat.*, Vol. CLXXVIII, coll. 358 ff.

² *De Fide Trinitatis*, Cap. 2.

³ *Metalogicus*, Lib. II, Cap. 13.

2. Consistently with his nominalistic doctrines that the genus and species have no substantial unity, — that the union of individuals in the genus or in the species is a mere fabrication of language or at most the work of thought, — Roscelin maintained that *the distinction of the whole and its parts* is also the result of mere mental analysis. Thus Abelard declares: "Fuit autem, memini, magistri nostri Roscelini tam insana sententia ut nullam rem partibus constare vellet, sed sicut solis vocibus species, ita et partes adscribebat";¹ and elsewhere,² after describing his former teacher as "pseudo-dialecticus et pseudo-christianus," he argues that when the Gospel tells us that Christ ate part of a fish Roscelin would be compelled to maintain that Christ ate *part of a word*.

3. Roscelin did not hesitate to apply his nominalism to the *doctrine of the Blessed Trinity*.³ The one nature in three divine persons must, he argued, be a universal. Now, the universal has no real existence. Therefore, he concluded, the oneness of the divine nature is not real (*tritheism*). That Roscelin held this doctrine is evident from the references of St. Anselm,⁴ from Abelard's epistle to the bishop of Paris, and from Roscelin's letter to Abelard.

4. It appears from the testimony of St. Anselm that Roscelin either taught or was suspected of teaching the tenets of *sensism*. In *De Fide Trinitatis*, Cap. 2, Anselm is evidently speaking of Roscelin's school when he says:

In eorum quippe animabus ratio, quæ et princeps et iudex omnium debet esse, quæ sunt in homine, sic est in imaginationibus corporalibus obvoluta ut ex eis se non posset evolvere nec ab ipsis ea quæ ipsa sola et pura contemplari debet valeat discernere.

In the fifth chapter of the same treatise allusion is made to the danger of passing from sensistic empiricism to *rationalism*: "Nolentes credere quod non intelligunt, credentes derident."

¹ *Ouvrages inéd.*, p. 471.

² *Epistola XXI ad Episcopum Parisiensem*.

³ It is by no means certain that this is the application which Roscelin made.

⁴ *Cf. De Fide Trinit.*, Cap. 1.

Condemnation of Roscelin. Scholastic philosophy contained from the very outset an element of rationalism, which Cardinal González¹ describes as "un racionalismo sui generis." The Scholastic movement was the outcome of an intellectual renaissance of Christian civilization, and hence the danger arose of claiming for reason too much freedom in the domain of theological inquiry. The peril which Scholasticism had to fear was two-fold: the abuse of reason on the part of the rationalist and the undue restriction of reason on the part of the mystic. Fulbert of Chartres (died 1029), Othlo of Regensburg (died 1083), and St. Peter Damian (998-1073) had already sounded the note of alarm, and had condemned the abuse of dialectic. Berengar of Tours (999-1088) had brought discredit on the Scholastic movement by his heterodox views on the question of transubstantiation, and his condemnation in 1050 by four different councils resulted in a more or less widespread suspicion of all philosophers and of philosophy itself. Under the influence of Lanfranc (1005-1089), abbot of Bec, and afterwards archbishop of Canterbury, there began what may be described as a reaction against the use of dialectic. The effect of Roscelin's Trinitarian error was similar to that of Berengar's heresy.

At the council of Soissons, held in 1092, Roscelin was obliged to retract his heretical teachings concerning the Trinity, but he continued, apparently, to teach his nominalistic dialectic. Again, in 1094, he was cited before the council of Rheims, and again he retracted (*abjuravit*). Afterwards, however, if St. Anselm is correct,² Roscelin asserted that he retracted "quia a populo interfici timebat." Picavet³ makes no mention of the second council, and maintains that the council of Soissons never condemned Roscelin; that, in fact, it could not condemn him, because he repudiated the doctrines attributed to him by John, a monk of the abbey of Bec.⁴ Nevertheless, Roscelin was virtually condemned by public opinion, and although after his brief sojourn in England he was restored to the dignity of canon and was even allowed to teach, he gave occasion to Anselm and others to look with suspicion on the use of dialectic argumentation, and on any attempt at opposing the realism which was the traditional view, — the *antiqua doctrina*, as Abelard calls it.

¹ *Historia de la Filosofia* (Madrid, 1886), II, 118.

² *De Fide Trinit.*, I, 1.

³ *Op. cit.*

⁴ Labbæus (X, 497) and Mansi (XX, 795) give the documents referring to the council held at Rheims in 1094. In these documents there is no mention of Roscelin.

Historical Position. Roscelin is not to be dismissed with the remark that he was "a dangerous heretic." His heretical doctrines are indeed to be deplored both because of the errors which they contain and because of the momentary discredit which they brought on the Scholastic movement; but it must be remembered that Roscelin remained faithful to his Catholic convictions, and by the strictness of his conformity to Christian ideals of conduct earned the right of criticising his contemporaries. In this respect he is to be contrasted with his pupil, Abelard, who was a rationalist devoid of all reverence for dogma and for traditional morality. Roscelin was an independent thinker who carried freedom of thought to the verge of rationalism. He represents an important phase of the Scholastic movement, — the beginning of the age of dialectic madness, through which the movement had to pass before reaching the age of constructive activity.

CHAPTER XXX

ST. ANSELM

Life. St. Anselm is a type of Scholastic altogether different from Roscelin and Abelard. He was born at Aosta in Lombardy, in 1033. In 1060 he entered the monastery of Bec. In 1078 he succeeded Lanfranc as abbot of Bec, and in 1093 became Lanfranc's successor in the archiepiscopal see of Canterbury. As primate of England he resisted with extraordinary firmness the encroachments of the secular power. He died in 1109. His life, written by his friend and disciple, Eadmer, a monk of Canterbury, is published by Migne.¹

Sources. The works of St. Anselm² include the following treatises: *Monologium*, *Proslogium*, *De Veritate*, *De Libero Arbitrio*, *De Fide Trinitatis* (against Roscelin), *Cur Deus Homo?* (on redemption and atonement), *De Incarnatione Verbi*, and *Dialogus de Grammatico*. Among recent additions to our secondary sources mention must be made of Rule's *Life and Times of St. Anselm* (2 vols., London, 1883) and Vigna, *Sant' Anselmo, Filosofo* (Milan, 1899), Rigg, *S. Anselm of Canterbury*, London, 1896.

¹ *Patr. Lat.*, Vol. CLVIII, coll. 50 ff.

² *Ibid.*, Vols. CLVIII-CLIX.

- DOCTRINES

Problem of Universals. St. Anselm seems to have attempted a compromise between the exaggerated realism of Erigena and the nominalism of Roscelin. He is a realist, as appears from his refutation of Roscelin and from his use of the term *substance* to designate the universal. But what is his precise position as to the manner in which the universal exists outside the mind? In the first place, he is clearly and unmistakably an Augustinian Platonist as to the existence of universals *ante rem* in the mind of God.¹ In the second place, he speaks of goodness (and what he says of goodness he implies to be true of other universals) as existing "in diversis, sive in illis æqualiter, sive inæqualiter consideretur." It is impossible to determine more accurately St. Anselm's doctrine of universals, because, apparently, he did not succeed in finding a more definite answer to Porphyry's questions. When, however, he called attention to the sensism latent in Roscelin's nominalism, and when, as in *Monologium*, X, he insisted on the distinction between sense by which the singular is perceived and intellect by which the universal is known, he *prepared the way for the moderate realism* which is based on a psychological analysis, and which could never have been discovered by means of the dialectical disputes of Roscelin and Abelard.

Relation of Philosophy to Theology. Faith and reason, far from contradicting each other, aid each other. *Intelligo ut credam* has for its complement *Credo ut intelligam*. Reason, of itself feeble and liable to error, is illuminated by the supernatural light of faith, so that the new fields of inquiry opened up to it by revelation are not beyond its scope. Indeed, St. Anselm attaches more importance to the *Credo ut intelligam* than to the *Intelligo ut credam*.² The relation between

¹ *Monologium*, XXVI-XXVII.

² Cf. *Proslogium*, Cap. I.

reason and revelation — between philosophy and theology — is further elucidated by the following principles :

Rectus ordo exigit ut profunda Christianæ fidei credamus priusquam ea præsumamus ratione discutere. Negligentiæ mihi esse videtur si postquam confirmati sumus in fide, non studemus quod credimus intelligere.¹

The *Credo ut intelligam* is evidently an echo of St. Augustine's *Crede ut intelligas*. The *Intelligo ut credam* is the formula of Scholasticism, the justification of the use of dialectic and of the application of dialectic to dogma within the limits of orthodoxy. It is interesting to note in St. Anselm's philosophy the development of another element which is as essential to Scholasticism as is the use of dialectic, namely, the union of faith and reason, of theology and philosophy. Erigena united the two sciences by identifying them ; St. Anselm recognizes that they cannot contradict each other, yet he contends that each has its separate sphere. It was left for the masters of Scholasticism in the thirteenth century to trace the lines by which the field of theological inquiry is marked off from the domain of philosophy.

St. Anselm's Method. St. Anselm adheres closely to the doctrines of St. Augustine. He states explicitly that St. Augustine is his favorite author, and that he never said anything which could not be corroborated by the writings and sayings of the bishop of Hippo. We are not surprised, therefore, to find that both in his philosophical method and in the contents of his philosophy Anselm reproduces the *Christian Platonism of St. Augustine*. God and the human soul are for him, as they were for his favorite author, the great subjects of inquiry : "Noverim me, noverim te!" He starts, for example, with the idea of the good, the just, the great, and rises by what has sometimes been called *Platonic induction* to the idea of goodness, justice, greatness, — to the idea of God.

¹ *Cur Deus Homo*, I, 1-2.

Theodicy. In the opening chapters of the *Monologium* Anselm recites the various Platonic and Augustinian arguments for the existence of God, — from the necessity of a permanent, immutable standard of justice, goodness, etc., from the evidences of order in the universe, and from the gradation of beings. While acknowledging the force of these arguments, St. Anselm (as he tells us in the *proœmium* to the *Proslogium*) began to inquire whether an argument could not be found which would of itself be sufficient to prove the existence of God. Such a proof he finally discovered and formulated in the *Proslogium*. It is known as the *ontological argument*, and is as follows: We define God as a being than which nothing greater can be thought. Now, there is in the mind the idea of such a being. But such a being must exist outside the mind; for, if it did not, it would not be that than which nothing greater can be thought. Therefore, God exists not only in the mind, as an idea, but also outside the mind, as a reality. St. Anselm presents the argument in two slightly different forms.¹ The *résumé* just given is a brief form of the argument as it occurs in the third chapter of the *Proslogium*.²

Anselm, in formulating the argument, alluded to the fool (*insipiens*) who, according to the Psalmist, "hath said in his heart: There is no God." Gaunilo, a monk of the monastery of Marmoutiers, criticised the argument in a work entitled *Liber pro Insapiente*,³ to which Anselm replied in a *Liber Apologeticus contra Gaunilonem*. The controversy was conducted with the greatest courtesy. Gaunilo acknowledged the merit of

¹ Cf. Chapters 1 and 3 of the *Proslogium*.

² The following is a stricter form of the argument: "Nomine Dei intelligitur id quo nihil majus cogitari potest. Atqui id quo majus cogitari nequit, existit non solum in intellectu, sed in re; si enim in solo intellectu est, potest cogitari esse et in re; quod majus est: nam quod existit in intellectu et re simul, certe majus est quam quod existit in mente solum. Ergo, . . ." Cf. *Divus Thomas, Series 2*, Vol. II, p. 307.

³ Cf. Migne, *Patr. Lat.*, Vol. CLVIII, col. 242.

Anselm's work, and Anselm praised his adversary and thanked him for his criticism. At a later time St. Thomas examined the ontological argument of St. Anselm and called attention to what is really the fatal flaw in every ontological proof, — the *transition from the ideal to the real*, from the world of thought to the world of things.¹ Albertus Magnus neither approved nor disapproved the argument. St. Bonaventure did not mention it; Duns Scotus adopted it and endeavored to give it greater strength; Ockam and Gerson rejected it; and in modern times it has been renewed in a slightly different form by Descartes and Leibniz. Of Kant's criticism of the argument mention will be made in the proper place.

It is necessary to remark that in a philosophy based on the ultra-realistic doctrine of universals, according to which the highest ideas of the human mind, substance, body, etc., as well as the generic concepts, animal, plant, etc., are realities existing as such, one may consistently maintain that the highest and most perfect of all our ideas — the idea of a being than which nothing greater can be thought — necessarily possesses objective reality.

From the idea of God as supremely perfect (*quo nihil majus cogitari potest*) St. Anselm deduces a whole system of natural theology: God is infinite, eternal, the sum of all perfection, the origin of all created being.

Psychological Doctrines. St. Anselm did not compose a separate treatise on psychology: the points of doctrine which are here gathered under the title "Psychological Doctrines" are found scattered through his different works. For instance, in the *Monologium*² he describes in general terms the *origin of ideas*:

Quamcumque rem mens, seu per corporis imaginationem, seu per rationem, cupit veraciter cogitare, ejus utique similitudinem quantum valet in ipsa sua cogitatione conatur exprimere.

¹ Cf. *Sum. Theol.*, I^a, II, 1, ad 1^{um}; and *Contra Gentiles*, I, 11.

² Cap. 33.

From which one may conclude that our philosopher, rejecting the doctrine of innatism, teaches that our ideas are formed from things by the abstractive power of the mind. By the words *imago, exprimere*, etc., he suggests the doctrine of *intentional species* which afterwards became so well known in the schools.

In the treatise *De Veritate*, St. Anselm distinguishes three kinds of truth, — *veritas enunciationis, veritas cogitationis*, and *veritas voluntatis*. A proposition is true when it expresses the relation existing between things; a thought is true when we judge (*cogitamus*) that to be which is, and that not to be which is not; the will is true when we will what we ought to will. The truth of the will is moral rectitude. In fact, truth of whatever kind is rectitude; truth may, therefore, be defined "Rectitudo sola mente perceptibilis."¹

In the *Monologium*² he speaks of the *immortality of the soul*. In his treatment of this, as well as of other questions, he deals chiefly with the religious and moral aspect of the problem, arguing that the soul is immortal because otherwise it could not love and enjoy God for all eternity. St. Anselm attached special importance to the *will and its freedom*, devoting to this subject the incomplete treatise *De Libero Arbitrio*, and the more comprehensive work *De Concordia Præscientiæ cum Libero Arbitrio*. In these treatises he is concerned not so much with proving that the will is free as with showing that freedom does not consist in the power of sinning, that no will is so free as that of the righteous man, and that neither temptation nor sin can take away our freedom so long as we live.³

Moral Doctrines. Like St. Augustine, St. Anselm is at pains to show that evil is merely the absence or negation of good. Passing from the notion of evil to that of moral good (*rectitudo*), he identifies the latter with justice. Man, he teaches, should do good for the sake of the good itself: "propter ipsam rectitudinem."

¹ *De Veritate*, col. 469.

² Capp. 68, 69, 72.

³ Cf. *De Lib. Arbitr.*, Cap. 1.

Herein Anselm's teaching apparently approaches very near to the Kantian doctrine of autonomous will and moral purism. The resemblance is, however, merely apparent. St. Anselm never intended us to forget that, while the good, for its own sake, is the immediate motive of action, the ultimate reason of all moral action is the will of God.¹ Moral evil (*injustitia*), since it is a negation, does not require a cause. Physical evil such as pain, blindness, etc., which St. Anselm calls *incommodum*, may be a positive thing, and may be caused by God.²

Historical Position. Perhaps the most important of all the theological treatises of the Middle Ages before the time of St. Thomas is St. Anselm's *Cur Deus Homo?* a work in which is propounded the Catholic doctrine of redemption and atonement. St. Anselm as a theologian does not, however, interest us here. As a philosopher he is best known by his ontological argument, which is his most important contribution to philosophy. The argument is one of many indications of the similarity of our philosopher's method and spirit to the method and spirit of St. Augustine. St. Anselm has been styled "the last of the Fathers," "the Augustine of the eleventh century." And indeed one cannot fail to observe the tendency of his mind to take the Augustinian, which is ultimately the Platonic, view of philosophical method, — to proceed by way of *descent* from the higher to the lower, rather than by way of *ascent* from the lower to the higher, in human thought and human knowledge. Still, our saint is a genuine Scholastic, a continuator of the tradition of the schools, a precursor of Albert and St. Thomas, a genuine representative of the Neo-Latin civilization. He is the monk-philosopher. His lifelong training in the cloister left its impress on his character as a man and on the style as well as the contents of his philosophical works.

¹ *De Verit.*, Cap. 12.

² *De Concordia*, etc., Cap. 7.

CHAPTER XXXI

WILLIAM OF CHAMPEAUX, THE INDIFFERENTISTS, ETC.

WILLIAM OF CHAMPEAUX

Life. William of Champeaux was, like St. Anselm, an opponent of the nominalism of Roscelin. He was born at Champeaux, a village near Melun, about the year 1070. At an early age he repaired to Paris to study under the renowned Alsatian teacher Manegold of Lautenbach. Later on he studied dialectic at Roscelin's school in Compiègne and theology at the school of Laon, over which the theologian Anselm (not St. Anselm of Canterbury) at that time presided. In 1103 he was summoned to Paris, was made archdeacon, and appointed to the chair of philosophy in the cathedral school. In 1108 he retired to the monastery of St. Victor, where he continued his career as a teacher and gave the initiative to the mystic movement which is associated with that abbey. He was promoted in 1113 to the see of Châlons-sur-Marne. He died in 1121.

William of Champeaux enjoyed among his contemporaries a very high reputation for learning and sanctity. He was known as the *Columna Doctorum*; according to Abelard, he was *re et fama præcipuus*; and when he died it was said that "the light of the Word of God was extinguished on earth."

Sources. Of the philosophical writings of William of Champeaux we possess merely some fragments: a portion of the work *De Origine Animæ*, published by Martene, and forty-two fragments discovered at Troyes by Ravaisson, portions also of a *Liber Sententiarum* and a *Dialogus seu Altercatio Cujusdam Christiani et Judæi*.¹ Our chief secondary sources of information are *Abelard*, who constantly refers to his rival teacher, and *John of Salisbury*. Michaud's *Guillaume de Champeaux* (Paris, 1867) is an excellent study of our philosopher and his times.

DOCTRINES

Problem of Universals. According to Abelard, William maintained that the universal is wholly and essentially present in each individual:

¹ Migne (*Patr. Lat.*, Vol. CLXIII) publishes fragments of *De Origine Animæ*, *De Sacramento Altaris*, *Dialogus seu Altercatio*, etc. Titles of forty-two fragments are given by Michaud, *op. cit.*, p. 532.

Erat autem ea sententia ut eandem *essentialiter* rem totam simul singulis suis inesse adstrueret individuís; quorum quidem nulla esset in essentia diversitas sed sola multitudine accidentium varietas.¹

Universals, therefore, exist in individual things. This is the thesis of *realism*. That by the word *essentialiter* William meant to convey a doctrine of exaggerated realism is apparent from the objections which Abelard urged against him. Among Abelard's objections we find the following: If the essence of humanity is wholly and essentially present in Socrates, it is not where Socrates is not. But it is also wholly and essentially present in Plato; therefore, Socrates must always be where Plato is.²

Unable to refute this and similar objections, William of Champeaux, after his retirement to St. Victor, formulated a new thesis in which he maintained that the universal is in the individual, not in the entirety of its essence, but by reason of its particular or individual modifications: "Sic autem istam suam correxít sententiam," says Abelard, "ut deinceps rem eandem non *essentialiter* sed *individualiter* diceret."³ Even if we substitute for the word *individualiter* the word *indifferenter* (and there seems to be better manuscript authority for *indifferenter*),⁴ we cannot arrive at a definite conclusion as to what was the precise meaning of the change which Abelard forced on his adversary. It is obvious, however, that the substitution of *individualiter* or *indifferenter* for *essentialiter* was meant as a concession to the anti-realists; the corrected expression was intended to convey a doctrine of more temperate realism. The end of the

¹ *Historia Calamitatum*, col. 119.

² Cf. Cousin, *Ouvrages inéd.*, p. 455.

³ *Hist. Calam.*, *ibid.*

⁴ Michaud (p. 231, n.) gives a fragment of William's work, *De Essentia et Substantia Dei*, which confirms the use of the word *indifferenter* in this context, and explains its meaning: *Vides (idem) duobus accipi modis, secundum indifferentiam et secundum identitatem prorsus ejusdem essentiae; secundum indifferentiam, ut Petrum et Paulum idem esse dicimus in hoc quod sunt homines . . . sed si veritatem confiteri volumus, non est eadem utriusque humanitas, cum sint duo homines.*

controversy, if we are to accept Abelard's authority, was that William, after having modified his first thesis, was obliged to abandon the second thesis altogether. The truth, however, seems to be that, although Abelard carried off the honors of the debate, William continued to teach realism while he remained at St. Victor.

Psychological Doctrines. In the work *De Origine Animæ* William refutes the doctrine of the traducianists (according to whom the soul of the child is in some way derived from the parents) and *defends the creationist doctrine* that the soul is created immediately by God. He teaches that the soul is a simple substance and that it is not distinct from its faculties or their operations.¹ He describes in the following terms the relation between body and soul:

Quæ duo (corpus scilicet et anima) ita quodammodo sunt inserta ut et corpus per spiritum sensificaretur, *i.e.*, illos quinque sensus haberet, et anima naturam corporis ita contraheret ut inde sensificaret, et irasceretur, vel concupisceret vel esuriret.²

Historical Position. William of Champeaux represents an important phase in the development of the doctrine of universal concepts. His most noteworthy contribution to philosophy is, however, his doctrine of creationism. It will be remembered that St. Augustine refused to decide the question of the origin of the soul. William is the first Christian philosopher in the West to maintain definitely and unhesitatingly the creation of the individual soul.

Associated with William of Champeaux are the realists Otto of Tournai, Adelard of Bath, and Walter of Mortagne.

OTTO OF TOURNAI

Life. Otto, or Odon, of Tournai (died 1113), was professor at Tournai, abbot of the monastery of St. Martin in that city, and subsequently bishop of Cambrai. Such was his renown as a teacher that Herman says, "Cives

¹ Cf. frag. 38, *apud* Michaud, *op. cit.*, p. 114.

² *De Origine Animæ*, frag. 3.

omnes relictis aliis operibus soli philosophiæ deditos crederes."¹ After he had devoted much attention to the study of Plato, he chanced one day to read some of St. Augustine's treatises against the Manicheans, and henceforth he gave all his time and attention to the study of theology. Before he took up the study of theology he composed several philosophical works. His principal theological treatise is entitled *De Peccato Originali*. His works are published by Migne (*Patr. Lat.*, Vol. CLX).

DOCTRINES

Otto was a Platonic realist. This appears from the work just mentioned and also from certain verses which were written by a contemporary, probably by a disciple of Otto, and attached to a manuscript copy of Boethius' work *De Hypothesis Syllogismis*.² He applied exaggerated realism (1) to the doctrine of *original sin*, teaching that the whole human race is one substance, and that, when our first parents sinned the whole race was vitiated, because the humanity which existed then as really as it exists now was contaminated; (2) to the account of the *origin of the soul*, maintaining that the act of creation consists merely in the production of new properties, which adhere in a previously existing substance, and serve to distinguish one soul from another, there being no substantial difference between individual souls.

Hildebert of Lavardin, a Platonist poet and mystic philosopher, belongs to the same school as Otto. Hauréau has been obliged to reconsider his decision that Hildebert was the author of the *Tractatus Theologicus*, which, according to some historians, was the model used by Peter the Lombard in composing his *Sentences*.³

¹ Migne, *Patr. Lat.*, Vol. CLXXX, col. 42. Herman was a monk of the abbey of Tournai and became abbot in 1127.

² Cf. Hauréau, *op. cit.*, I, 308.

³ Cf. *Archiv f. Gesch. der Phil.*, X (1897), 135.

ADELARD OF BATH

Life. Adelard of Bath (*circa* 1100), who, about the beginning of the twelfth century, studied at Tours and at Laon, was the first of the mediæval teachers to seek enlightenment by traveling in Greece and Asia Minor. His principal works are *Quæstiones Naturales*, published in 1472, and a treatise *De Eodem et Diverso*, which has recently been published in *Beiträge zur Gesch. der Phil. des Mittelalters* (IV, 1).

DOCTRINES

Adelard is a Platonist. He teaches that *ideas are innate*, having been placed in the soul by the Creator at the beginning of the world :

Conditor immensitatis . . . præcellenti naturæ quam animam vocamus intellectuales formas omnium creaturarum induit . . . Illum itaque formarum intellectualium thesaurum non semper, sed cum necesse est, explicat.¹

In the treatise *De Eodem et Diverso* Adelard solves the problem of universals by the doctrine of *indifferentism*, which closely resembles the second form of William of Champeaux's realism. The *indifferentists* maintained that in every individual we may distinguish the determinations which belong to the individual, namely, the differentiating mark (*differens*), and the generic or specific part of the individual, namely, the common element (*indifferens*) which it shares with others of the same genus or species. The latter alone is universal. Making a further distinction between essence and substance, the indifferentists granted that the *essence* includes the *differens*; and therefore, they argued, there is no universal essence. They contended, however, that *substance* does not include the *differens*, and thence they inferred that substance is (physically) one and common to all individuals.²

¹ *Quæstiones Naturales*, apud Hauréau, *op. cit.*, I, 355, n.

² Cf. *Ouvrages inéd.*, CXXIII, and a passage quoted by Hauréau, *op. cit.*, I, 349, from *De Eodem et Diverso*.

WALTER OF MORTAGNE

Walter of Mortagne was born about the beginning of the twelfth century, at Mortagne in Flanders. After studying at Tournai, he went to Paris, where from 1136 to 1144 he taught at the school of Ste. Geneviève. He died bishop of Laon in 1174. He composed a work entitled *Tractatus de Sancta Trinitate* and six *Opuscula*. Five of the *Opuscula* are published in D'Achery's *Spicilegium* (Paris, 1723), and the sixth in Migne's *Patr. Lat.*, Vol. CLXXXVI, col. 1052.

DOCTRINES

Walter, like Adelard, is a Platonist. In a letter to Abelard¹ he expresses the belief that the body is an obstacle to the higher operations of the soul. He is best known, however, by his doctrine of *non-difference* or *indifference*, which is described by John of Salisbury, his disciple, in the following terms:

Hic, ideo quod omne quod est unum numero est, rem universalem aut unam numero esse aut omnino non esse concedit. Sed, quia impossibile substantialia non esse, existentibus his quorum sunt substantialia, denuo colligunt universalia singularibus, quod ad essentiam, unienda. Partiuntur itaque *status*, duce Gualtero de Mauritania, et Platonem in eo quod Plato est, individuum; in eo quod homo, speciem; in eo quod animal, genus, sed subalternum; in eo quod substantia, generalissimum.²

The doctrine of indifferentism is further described in a document, No. 17813 of the *Bibliothèque Nationale*, published by Hauréau in 1892, and attributed by him to Walter. The document defines *differens* and *indifferens*, and proceeds:

Et attende quod Socrates et unumquodque individuum hominis, in eo quod unumquodque est animal rationale mortale, sunt unum et idem.³

It is worthy of remark that in this document the *status* of which John of Salisbury speaks are called *attentiones*. They suggest at once the *formalitates* of Duns Scotus.

¹ *Spicilegium Dacherii*, III, 525.

² *Metal.*, II, 17.

³ Hauréau, *Notices, etc.* (Paris, 1892), Vol. V, p. 313.

The question of the interpretation of the passage just quoted is to be answered according to the meaning attached to the phrase "unum et idem." Does it mean mere logical unity, or does it mean that there is in the world of reality a *one* which is "animal rationale mortale"? If the unity is merely logical, — the work of the mind, as the word *attentio* seems to imply, — we have here the nearest approach of realism to the moderate realism of St. Thomas. If, on the contrary, the unity is real and objective, we have, instead, a form of Platonic realism. We must decide in favor of the latter interpretation, for it is on the supposition that the latter is the true interpretation, and on that supposition alone, that we can understand the objections which Abelard and others urged against the doctrine of indifferentism.

Historical Position. The school of Tournai and the advocates of indifferentism represent an attempt at founding a realistic doctrine of universals on an eclectic union of Platonic and Aristotelian principles. Before we take up the history of the more thoroughgoing Platonism of the school of Chartres it is necessary to study the philosophy of Abelard, the opponent of realism and the chief advocate of what was then understood to be the Aristotelian doctrine of concepts.

CHAPTER XXXII

ABELARD

Life. The most conspicuous figure in the great dialectical contest which occupied so large a share of the attention of philosophers during the twelfth century is Peter Abelard, who was born at Pallet, near Nantes, in Brittany, in the year 1079. After having studied under Roscelin he went to Paris, where he attended the lectures of William of Champeaux. Being, as St. Bernard says, "vir bellator ab adolescentia," he quarreled with his master, and, at the age of twenty-two, set up a rival school, teaching first at Melun and afterwards at Corbeil. When William retired to the monastery of St. Victor (1108) Abelard returned to Paris, where he enjoyed the

most extraordinary success as a lecturer on dialectic. He first taught at Ste. Geneviève and later (about 1113) at the cathedral school of Notre Dame. In his autobiography, which he so appropriately styles *Historia Calamitatum*, he tells of his love for Heloise, of the vengeance of the canon Fulbert, of the secret marriage, of his entry into the Benedictine order at the abbey of St. Denis, of the retirement of Heloise to the convent of Argenteuil, and of the foundation of the oratory called the Paraclete. He makes no secret of the pride and vanity to which he attributed his downfall and the sufferings of his later life.¹

About the time he had attained the greatest eminence as a teacher of dialectic, Abelard presented himself at the school of the venerable Anselm of Laon for the purpose of studying theology. At Laon it was the same story of insubordination as at Paris: Abelard was uneasy until he had discomfited the *Doctor Doctorum* (Anselm) as completely as he had overthrown the *Columna Doctorum* (William of Champeaux). After the downfall of Abelard the disciples of Anselm had their day of revenge. Summoned before the council of Soissons (1121) Abelard was obliged to recite the Athanasian creed and to burn his book on the Trinity.² After this he retired to a desert region near Troyes. Thence he went to the monastery of St. Gildas de Rhuys in Brittany. The monks, however, drove him from the abbey, and after some years spent in the neighborhood of Nantes he resumed his lectures at Paris. Pupils now began to flock in such numbers to his school that Anselm's disciples became alarmed once more, and the intervention of St. Bernard of Clairvaux was invoked. Abelard treated Bernard and his monks with characteristic disdain. St. Bernard wrote to Rome, and sent a circular letter to the bishops of France. The result was, that at Abelard's own request (so at least it seems) a council was assembled at Sens (1140).³ Abelard, however, refused to defend himself; nevertheless he was condemned, but, because he appealed to Rome, he was allowed to accept the hospitality of the venerable Peter of Cluny,⁴ at whose monastery he spent the last two years of

¹ *Hist. Calam.*, col. 126.

² The work condemned and burned on this occasion was the *Tractatus de Unitate et Trinitate Divina*. This treatise was discovered and edited in 1891 by Dr. Stölze of Würzburg. The *Theologia Christiana*, as we now possess it, is a revised form of the original *Tractatus*, with some significant omissions and some amplifications by way of explanation and apology. Cf. Poole, *op. cit.*, p. 150.

³ Deutsch, *Die Synode von Sens, 1141* (Berlin, 1880), maintains that the Synod was held in 1141. Cf. Denifle, *Archiv*, I, 603, 606.

⁴ Peter, writing under the impressions of these two years' intercourse with Abelard, describes him as "ever to be named with honor, the servant of Christ

his life in peace. He died, in 1142, at Châlons-sur-Saône, four leagues distant from Cluny, and was buried at the Paraclete.

Character. Abelard is a type of the fighting dialectician of the twelfth century, — *vir bellator*. He was by disposition a rationalist, intolerant of restraint, totally devoid of respect for authority, and so fond of displaying his extraordinary talents that he appears to have preferred victory to truth.

Sources. In addition to the *Historia Calamitatum*, we possess the following works of Abelard (*cf.* Migne, *Patr. Lat.*, Vol. CLXXVIII): *Epistola*, *Expositio Fidei*, *Introductio ad Theologiam*, *Theologia Christiana*, *Ethica* (or *Scito Teipsum*), *Sic et Non*, *Dialogus inter Philosophum Judæum et Christianum*. To these are to be added the *Summa Dialecticæ* and perhaps also the fragment *De Generibus et Speciebus* published by Cousin. Monographs: Rémusat, *Abélard* (Paris, 1845); Deutsch, *Peter Abälard* (Leipzig, 1883).

DOCTRINES

Method. Abelard is primarily a dialectician. Dialectic he defines as the art of discerning the true from the false: it implies the task of discerning or distinguishing thoughts and the subsidiary task of distinguishing words. In the *Sic et Non* Abelard formulates the principal theses of theology and presents the opinions of the Fathers *pro* and *contra*. This idea of philosophic method was further developed by Alexander of Hales, and became the recognized method of the schoolmen of the thirteenth century and of their successors.¹

Doctrine of Universals. There is nothing more certain than that Abelard was equally opposed to the nominalism of Roscelin and to the realism of William of Champeaux. It is not, however, so easy to determine what was Abelard's own answer to

and verily Christ's philosopher" (*Epistola ad Heloissam*, *Patr. Lat.*, Vol. CLXXVIII, col. 66). That St. Bernard was unfair to Abelard both before and after the council is the opinion now entertained by many Catholic writers. *Cf.* Mabillon (*Prefatio in Bernardi Opera*, I, note 5); Pez (*Thesaurus Anecdotorum Novissimus*, III, dissert. isag.). *Cf.* also Hefele, *Conciliengeschichte*, Zweite Aufl., V, pp. 469, 481, 485.

¹ *Cf.* Picavet, *Abélard et Alexandre de Hales, créateurs de la méthode scolastique* (brochure).

the questions proposed by Porphyry. John of Salisbury, a disciple of Abelard, after mentioning the opinion of Roscelin, speaks of Abelard's doctrine in the following terms:

Alius sermones intuetur et ad illos detorquet quidquid alicubi de universalibus meminit scriptum. In hac autem opinione deprehensus est peripateticus palatinus Abælardus noster.¹

Distinguishing between *vox* and *sermo* (the word as used in a sentence), Abelard would maintain "est sermo predicabilis." Apparently, therefore, Abelard was a modified nominalist: he is generally classed with the conceptualists, and John of Salisbury's statement that Abelard and his followers "*rem de re prædicari monstrum ducunt*"² seems definitely to exclude them from the ranks of the realists.

From the texts furnished by Rémusat and Cousin, it is clear that the traditional opinion which regarded Abelard as the founder of conceptualism must be abandoned. Abelard nowhere teaches that the universal existing in the mind has no objective value. On the contrary, while he does not succeed in discovering a neat and concise formula in which to express his doctrine of realism, he maintains principles which justify us in classing him not only among the anti-realists, who opposed exaggerated realism (the *antiqua doctrina*), but even among the moderate realists, although his moderate realism is naturally undeveloped. Among the principles to which we refer are the following:

1. The universal has no existence apart from the individual: "*Cum nec ipsæ species habeant nisi per individua subsistere.*"³

2. The universal is not a mere word: the word becomes universal by means of the mode of predication which it assumes on being made part of a sentence. It is therefore, presumably, the mind which confers universality, on account of the essential similarity of different individuals. This thought is not, however,

¹ *Metal.*, II, Cap. 17.

² *Ibid.*

³ *Summa Dialecticæ, Ouvrages inéd.*, p. 204.

explicitly enunciated by Abelard : it is merely contained in his distinction of *vox* and *sermo*.

3. The *difference* of genera and species is founded on a difference of things : "Diversitas substantiæ diversitatem generum et specierum facit."¹

Relation of Philosophy to Theology. In the *Introductio ad Theologiam* Abelard lays down certain principles which seem to remove all distinction between philosophy and theology by reducing the latter to the level of the former. Faith must be based on reason :

Si enim, cum persuadetur aliud ut credatur, nil est ratione discutiendum, utrum scilicet credi oporteat vel non, quid restat nisi ut æque tam falsa quam vera prædicantibus acquiescamus.²

Again, he says : "Nec quia Deus id dixerat creditur, sed quia hoc sic esse convincitur accipitur,"³ — a principle which, it is said, offended St. Bernard's sense of orthodoxy and constituted the real reason of Abelard's second condemnation.

The *Credo ut intelligam* and the *Intelligo ut credam* are equally essential to the Scholastic doctrine of the relation between philosophy and theology. By neglecting the former altogether, and by insisting on the latter exclusively, Abelard unduly emphasizes the rationalistic element in Scholasticism. Like Erigena, he identifies philosophy with theology. But, while Erigena understood the identity in one sense, Abelard understands it in another : Erigena's point of view was that of a mystic ; Abelard's point of view is that of a rationalist. Erigena raised philosophy to identification with theology, because God, the object of theology, is the only reality, and is therefore the object of philosophy. Abelard lowers theology to identification with philosophy, because the principle that in order to believe we must first understand is by him extended to mean that reason can comprehend even the mysteries of faith. It was in this

¹ *Sum. Dial., Ouvrages inéd.,* p. 418. ² *Introductio ad Theologiam,* col. 1049.

³ *Op. cit.,* col. 1050.

spirit of rationalism that Abelard, according to Otto of Freising, compared the Holy Trinity to a syllogism. In a similar spirit, he affirmed the moral precepts of the Gospel to be merely a reformation of the natural law observed by pagan philosophers, and said and wrote many things which, though they were not heretical, gave offense by reason of their total disregard for authority.

We are not here concerned with the theological doctrines for which Abelard was twice condemned. It is sufficient to note that the sum of the accusations brought forward by St. Bernard was that Abelard regarded the Trinity as a mere trinity of names, or, at most, of attributes.

Origin of the Universe. Abelard's account of the origin of things is characterized by *necessitarianism* and *optimism*. Whatever God made, He made necessarily; for, whatever He made is good, and to say that He could abstain from doing what is good is to accuse Him of jealousy or of downright malice.¹ God therefore made everything that He could make: "Ergo ubi non est velle Dei deest posse,"² and the world is the best possible world, for the evil which exists is such as God could not prevent. In a certain sense, however, God created freely, because in the act of creation He was constrained by no external agent but only by His own nature.³

Psychological Doctrines. The soul, although in itself simple and spiritual, yet, inasmuch as it is included in the body, is corporeal. For this reason Abelard⁴ says that all creatures are corporeal; the angels, because they are circumscribed by place, and the human soul because it is included in the body. The soul is the principle of life: it makes the body to be what it is.

Abelard speaks of free judgment (*liberum arbitrium*) rather than of free will. Judgment is free because there is no

¹ *Theologia Christiana*, Lib. V, col. 1324. ³ *Ibid.*

² *Cf. op. cit.*, coll. 1329-1330.

⁴ *Introd. ad Theol.*, Lib. III, Cap. 6.

compulsion, and freedom consists in the power to act or abstain from acting.¹

Ethical Doctrines. In his ethical treatise² Abelard distinguishes between *vitium*, *peccatum*, and *mala actio*. *Vitium* is the inclination to sin, — “id quo ad peccandum proni efficimur, hoc est ad consentiendum ei quod non convenit.” *Peccatum* is not mere *mala voluntas*: it is “contemptus Dei, sive consensus in eo quod credimus propter Deum dimittendum.” *Mala actio* is the external act, the *opus peccati*, which is not, properly speaking (that is, formally), a sin at all, but merely the matter of sin.

From this distinction it follows that all external actions are, in themselves, morally indifferent: it is the intention that causes them to be good or evil: “Opera omnia in se indifferentia, nec nisi pro intentione agentis bona vel mala dicenda sunt.”³ God looks not to the deed, but to the intention, and He punishes the intention rather than the act, — “non enim Deus ex damno, sed ex contemptu offendi potest.” Finally, where ignorance blinds or force coerces there is no sin, sin being essentially something contrary to conscience: “Non est peccatum nisi contra conscientiam.”⁴ Conscience must, therefore, be our guide, since it corresponds to the external norms of conduct.

Historical Position. Abelard was acknowledged to be the foremost dialectician of an age in which dialectic was cultivated as it never has been cultivated since. “Huic soli,” says an epitaph, written by a contemporary, “patuit scibile quidquid erat.” He appeared in the twelfth century like a brilliant comet which dazzled for a moment but failed to shed permanent light. His was a highly gifted mind, but it was a mind whose prominent quality was brilliancy rather than profundity. He discussed many questions but exhausted none. His career, however, brought out the many-sidedness of the Scholastic movement, by exhibiting in exaggerated form the rationalistic element of

¹ *Introd. ad Theol.*, Lib. III, Cap. 7.

² *Ethica*, Cap. 3.

³ *Op. cit.*, Cap. 7.

⁴ *Op. cit.*, Cap. 13.

Scholasticism. Abelard was condemned, not because he advocated the rights of reason, nor because he applied dialectic to the discussion of the Trinity, — St. Augustine had done this without incurring reproach, — but because of the extravagant claims which he urged on behalf of reason, and because of the heresy into which he fell in his discussion of the Trinitarian mystery.¹

CHAPTER XXXIII

THE SCHOOL OF CHARTRES

During the twelfth century Chartres became the scene of a Platonic reaction against the anti-realism represented by Roscelin and Abelard. The founders of the school of Chartres were the brothers **Bernard** and **Theodoric** of Chartres, with whom were associated **William of Conches** and **Gilbert de la Porrée**.²

BERNARD OF CHARTRES

Life. Bernard of Chartres taught at Chartres during the early part of the twelfth century. Among his disciples were William of Conches and Gilbert de la Porrée. In 1119 he was made chancellor of the church of Chartres. He died about the year 1125.

Sources. According to John of Salisbury, Bernard composed a prose treatise, *De Expositione Porphyrii*, a metrical treatise on the same subject, a moral poem on education, and probably a fourth work in which he sought to reconcile Plato with Aristotle. Fragments of these treatises are to be

¹ The work *De Generibus et Speciebus* which Cousin includes among Abelard's works was written, according to Ritter, by **Joscelin (Gauslenus)** of Soissons (bishop of Soissons from 1122 to 1151), of whom John of Salisbury makes mention in his *Metalogicus* (II, 17). Ritter's conjecture is not, however, accepted by Stöckl and others, who are content with assigning the treatise in question to some writer belonging to the first half of the twelfth century. The author of the treatise is equally opposed to nominalism and to that form of realism which maintains the physical unity of that which corresponds to the universal.

² On the school of Chartres, cf. Clerval, *Les écoles de Chartres au Moyen-Âge* (Chartres, 1895).

found in the *Metalogicus*, IV, 35, and the *Polycraticus*, VII, 13 (*apud* Migne, *Patr. Lat.*, Vol. CXLIX, coll. 938 and 666). Hauréau (*op. cit.*, I, 408) falls into the common error of confounding Bernard of Chartres with Bernard of Tours, and assigns to the former works which are to be ascribed to the latter.

DOCTRINES

Bernard, in common with others of his school, devoted more attention to the study of the *Timæus* and of the works of the Neo-Platonists than to the study of Aristotle's dialectical treatises and of the commentaries of Boethius. Consequently, he not only discussed the problem of universals (distinguishing between the abstract, the process, and the concrete, — *albedo*, *albet*, and *album*),¹ but also occupied himself with problems of metaphysics and cosmology.

Metaphysics. There are three categories of reality, — *God*, *matter*, and *idea*. God is supreme reality. Matter was brought out of nothingness by God's creative act, and is the element which, in union with Ideas, constitutes the world of sensible things. Ideas are the prototypes by means of which the world was from all eternity present to the Divine Mind; they constitute the world of Providence ("in qua omnia semel et simul fecit Deus"), and are eternal but not coeternal with God. According to John of Salisbury, Bernard also taught that there exist *native forms* — copies of the Ideas created with matter — which are alone united with matter. It is difficult, however, to determine what was Bernard's doctrine on this point. It is sufficient to note that he reproduced in his metaphysical doctrines many of the characteristic traits of Platonism and Neo-Platonism, — the intellect as the *habitat* of Ideas, the world-soul, eternal matter, matter the source of imperfection, etc.

Cosmology. Matter, although caused by God, existed from all eternity. In the beginning, before its union with the Ideas,

¹ Cf. *Metal.*, III, 2, *apud* Migne, *Patr. Lat.*, Vol. CXCIX, col. 893.

it was in a chaotic condition. It was by means of the native forms, which penetrate matter, that distinction, order, regularity, and number were introduced into the universe.

THEODORIC OF CHARTRES

Life. Theodoric of Chartres was *magister scholæ* at Chartres about the year 1121. It is said that he taught at Paris in the year 1140: it was probably at Paris that he taught rhetoric to John of Salisbury. In 1141 we find Theodoric teaching once more at Chartres. Like Bernard, he devoted more attention to the study of the Platonists than to that of the Aristotelians. The most probable date of his death is 1150.

Sources. Besides the work *De Sex Dierum Operibus*, of which a mutilated manuscript copy has come down to us, Theodoric wrote a commentary on the *De Inventione Rhetorica ad Herennium*. This commentary, which was first published in 1884, is an indication of the humanistic tendency of the school of Chartres.¹

DOCTRINES

Theodoric was an enthusiastic student of the classics, "artium studiosissimus investigator," as John of Salisbury says. We know that he possessed a Latin translation of the *Planisphere* of Ptolemy, which he obtained from the Arabian scholars of Toulouse. It was, however, to the Platonic metaphysics and cosmology that he devoted his attention as a philosopher, taking his stand with the other "Chartrains" on the side of the Platonic realists.

Metaphysics. Going farther in his advocacy of Neo-Platonic principles than Bernard had gone, identifying unity with divinity and divinity with reality, Theodoric maintained the principles "Divinitas singulis rebus forma essendi est" and "Omne quod est ideo est quia unum est."² Now, if divinity is synonymous with reality and is the intrinsic essential principle of all things,

¹ The work *De Sex Dierum Operibus* was published by Hauréau (*Notices*, etc., Vol. XXXII, Part II, p. 167); Clerval (*op. cit.*, p. 172) mentions a work entitled *Eptateuchon*.

² Cf. Hauréau, *loc. cit.* and Clerval, *op. cit.*, pp. 255 ff.

Theodoric's system is fully developed pantheism. Quite recently, however, Baeumker has shown¹ that here, as in the case of Eckart and other mediæval mystics, we must distinguish between the *individual essence*, which is proper to each created being, and the *formal essence*, the divine in each creature, which is God. Technically, therefore, Theodoric must be considered innocent of the charge of teaching explicit pantheism.

Cosmology. In the work *De Sex Dierum Operibus* Theodoric set himself the task of showing that the Neo-Platonic account of the origin of the universe agrees with the Mosaic account of the creation. Moses, he declared, was *prudentissimus philosophorum*.

WILLIAM OF CONCHES

Life. William of Conches, a pupil of Bernard of Chartres, after having taught a system of Platonic realism in the schools at Paris (about 1122), was warned by William of St. Thierry that his theological doctrines, and in particular his apparent identification of the Holy Ghost with the world-soul, would lead to heresy. Thereupon he abandoned the study of theology and, seeking the protection of Geoffrey the Fair, count of Anjou, devoted himself to the study of nature. William is the first of the mediæval philosophers to show acquaintance with the physical science of the Arabians, which, through the translations made by Constantine the African, began to be known in Europe about the middle of the twelfth century.

Sources. No question of mediæval bibliography is more hopelessly intricate than that of the authorship of the works attributed to William of Conches. The most recent investigations and discussions² seem to warrant the following list: glosses on the *Timæus*, a commentary on *Boethius' De Consolatione Philosophia*, a treatise *De Philosophia*, of which the *Dragmaticon* (probably *Dramaticon*) is a corrected edition cast in dialogue form, and the *Magna de Naturis Philosophia*. It is almost certain, however, that the last mentioned work, of which no copy is extant, belongs to a later date and was written by William of Auvergne. The *Dragmaticon* in its earliest form is published by Migne (*Patr. Lat.*, Vol. XC, coll. 1127 ff.), under the title *Elementorum Philosophia Libri Quatuor*.

¹ Cf. *Archiv f. Gesch. der Phil.*, X, 138.

² Cf. Poole, *Illustrations of the History of Medieval Thought* (London, 1884), pp. 338 ff.

DOCTRINES

After his retirement from the field of theological and metaphysical controversy, in which he had sustained the cause of the Platonists, who were edging closer and closer to the border line of pantheism, William, inspired by the labors of the Arabian physicists, took up the study of psychology and cosmology.

Psychology. In his study of the processes of knowledge William distinguishes between sensation, imagination, and reason. Rejecting the theory of forms mediating between object and subject, he devotes his attention to what we should call the *physiological aspect* of the problems of psychology. There are, he says, three departments in the brain ("in capite tres sunt cellæ, una in prora, altera in puppe, tertia in medio"). In the front part of the brain is the region of vision (*fantastica*), in the middle is the region of thought (*logistica*), and in the rear portion is the region of memory (*memoralis*). In his commentary on the *Timæus*, however, he speaks as a Platonist. Above all the faculties of the soul, he says, is *voûs* (intelligence), by which alone we are enabled to perceive the incorporeal.

Cosmology. In his account of the universe and the elements which compose it, our philosopher is an *atomist*: "Sunt, igitur, in unoquoque corpore minima quæ, simul juncta, unum magnum constituunt"; and when the interlocutor objects that this is the opinion of Epicurus, William answers that there is no sect that has not some admixture of truth.¹

GILBERT DE LA PORRÉE

Life. Gilbert was born at Poitiers, in 1076. He was successively the pupil of Bernard of Chartres and of Anselm of Laon. After teaching for about twenty years at Chartres, where he held the office of chancellor, he went to Paris and there lectured on dialectic and theology. Later on he returned to Poitiers, of which city he was made bishop in 1142. On

¹ Cf. *Dragmaticon*, I, 25, quoted by Poole, *op. cit.*, p. 349.

account of his theological doctrines concerning the Trinity and the Incarnation he was suspected of heresy by St. Bernard and his followers. The council of Paris, which, in 1147, was summoned to consider his doctrines, and which was presided over by Eugenius III, was unable to arrive at a decision. It reassembled at Rheims in the following year. According to the account given by John of Salisbury, who was present, and by Otto of Freising, also a contemporary, it was not the doctrine of Gilbert but the influence of St. Bernard that was on trial. The outcome seems to have been that the council decided nothing. Gilbert returned to his see and was not further molested. He died in 1154.

Sources. Gilbert composed a work entitled *De Sex Principiis*, a treatise on the last six of the Aristotelian categories. This book was made the basis of commentaries by Albert the Great; it was frequently referred to by St. Thomas, and it was held in great esteem as a text-book on logic until the close of the Middle Ages. Gilbert wrote also a commentary on the treatise *De Trinitate*, which was supposed to have been written by Boethius. Mention is also made of a work *De Duabus Naturis et Una Persona Christi*; this, however, is apparently the fourth book of the pseudo-Boethian compilation. The commentary on the pseudo-Boethian treatise is published by Migne, *Patr. Lat.*, Vol. LXIV, and the treatise *De Sex Principiis*, *ibid.*, Vol. CLXXXVIII, coll. 1257 ff.

DOCTRINES

Notwithstanding the renown which Gilbert attained as an exponent of Aristotelian dialectic, his philosophy, as far as we know it, breathes the spirit of Plato and betrays the Platonizing influence of the school of Chartres.

Doctrine of Universals. In his doctrine of universals Gilbert, according to John of Salisbury, attributed universality to the *formæ nativæ* existing in things :

Est autem forma nativa originalis exemplum et quæ non in mente Dei consistit, sed rebus creatis inhæret. Hæc Græco eloquio dicitur eidos.¹

Nativa in the context evidently means new, born, created. But what are these created forms inherent in created things? It is

¹ *Metal.*, II, 27.

usual to represent them as full-fledged universals, possessing their universality antecedently to the act of the human mind; and if this interpretation be correct, Gilbert should be reckoned among the ultra-realists. It is evident, however, from the commentaries on the *Four Books on The Trinity*, that Gilbert attached quite a different meaning to the *formæ nativæ*. He says, for example:

Non solum enim rationalium sed etiam non rationalium substantiarum individuarum universalia quædam sunt, quæ ab ipsis individuis humana ratio quodammodo abstrahit ut earum naturam perspicere . . . possit.¹

It is, therefore, the mind that abstracts the universal and makes it to be universal, — a formula which at once separates Gilbert from the ranks of the ultra-realists. Elsewhere² he bases the unity of the universal on the *similarity* of essences, — another formula which is opposed to ultra-realism. There must, however, be some reason why so many historians have counted Gilbert among the ultra-realists, and the explanation may possibly be found in the fact that his general metaphysical doctrines are Platonic.

Metaphysical Doctrines. Thus, when Gilbert distinguishes between the essential reality, which he calls the *subsistence* ("id quo est"), and the individual determination, which he calls the *substance* ("id quod est"), an Aristotelian might admit the distinction. Gilbert, however, goes so far as to maintain that unity, for example, is a subsistence distinct from that which is one.³ The Platonic tendency is also apparent in the doctrine of *native forms*, although Gilbert is careful to avoid the Neo-Platonic doctrine that the forms are in some sense to be identified with the mind of God ("non in mente Dei consistit").

Historical Position of the School of Chartres. The group of philosophers included under the title of this chapter represents an eclectic tendency, that is, an attempt at uniting Platonism

¹ Migne, *Patr. Lat.*, Vol. LXIV, col. 1374.

² As e.g., col. 1263.

³ Cf. *op. cit.*, col. 1376.

with Aristotelianism. To this eclectic tendency is joined a broader spirit of humanism and, at least in the case of William of Conches, a spirit of scientific inquiry. The spirit of eclecticism and also the humanistic and scientific spirit are still more marked in the next group of philosophers.

CHAPTER XXXIV

ECLECTICS

Although **John of Salisbury** is perhaps the only professedly eclectic philosopher of this period, the eclectic tendency is apparent in **Peter the Lombard**, **Alanus of Lille**, **Gerard of Cremona**,¹ and others.

JOHN OF SALISBURY

Life. John of Salisbury, after completing his preliminary studies in England, went to Paris (about 1136), where he had for teachers many of the most renowned masters of the schools, — Abelard, William of Conches, Theodoric of Chartres, Walter of Mortagne, and Gilbert de la Porrée. He lived on terms of friendship with St. Thomas Becket, Henry II of England, and Pope Adrian IV. In 1176 he became bishop of Chartres, and died there in 1182.

Sources. In addition to his *letters*, which shed so much light on the history of his times, John of Salisbury wrote a large number of philosophical works, of which the most important are the *Polycraticus* and the *Metalogicus*. These are published by Migne, *Patr. Lat.*, Vol. CXCIX.

DOCTRINES

John contributed very little to the philosophical discussions which occupied to such an extent the minds of his contemporaries. He was a historian, a humanist, and a critic, rather than a dialectician. Indirectly, however, he rendered valuable service to the cause of philosophy by his advocacy of culture, and by his

¹ Gerard (1114–1187) was one of the first translators of the scientific works of the Arabians. Cf. Muratori, *Rerum Italicarum Scriptores*, IX, 600.

denunciations of obscurantism, which was represented in those days by the *Cornificians* (pseudonym), a sect which flourished about the middle of the twelfth century.¹ But, while advocating culture, and studying the opinions of his contemporaries, he recognized the danger of dialectic run riot, and strove in his eclectic synthesis to give philosophy a more practical turn. He devoted some attention to the study of psychology, being influenced, apparently, by the physiological method of William of Conches. It must not be forgotten that John of Salisbury is the first mediæval historian of philosophy. To him we owe much of what is known about the great controversy of his century concerning the problem of universals.

PETER THE LOMBARD

Life. Peter the Lombard, surnamed *Magister Sententiarum*, was born at Novara in Lombardy, about the beginning of the twelfth century. He studied first at Bologna and afterwards at Paris. At Paris he taught theology for many years and was promoted to the bishopric of that city. He died about the year 1160.

Sources. Peter's *Four Books of Sentences* is a collection of the opinions of the Fathers on questions of Catholic dogma. It is modeled, apparently, on previous compilations. It became, and for several centuries remained, the text-book of the schools and was made the subject of commentaries innumerable. Around the exposition and defense of dogma contained in these commentaries there grew up problems of metaphysics and psychology, so that in the thirteenth century the *Books of Sentences* was the core of Scholastic literature. The work is published by Migne, *Patr. Lat.*, Vol. CXCII.

DOCTRINES

Peter the Lombard was primarily a theologian. In matters of philosophical discussion he strove to maintain a neutral attitude. His orthodoxy was attacked, though unsuccessfully, by Walter of St. Victor, representative of the mystic school.

¹ Cf. *Metal.*, I, 1, 2, 3, *apud* Migne, *Patr. Lat.*, Vol. CXCIX, coll. 826 ff.

Another writer of *Sentences* was Cardinal Robert Palleyne or Pulleyn. He was a distinguished teacher, and was connected both with the theological schools of Paris and with those of Oxford. The date of his death is 1154. His work is entitled *Sententiarum Libri Octo*.¹

ALANUS OF LILLE (*ab Insulis*)

Life. Alanus was born about 1128 at Lille in Flanders. It is probable that towards the middle of the twelfth century he taught at Paris. He died at Cîteaux in 1202 or 1203.

Sources. The most important of Alanus' works are the *Ars Catholica Fidei*, *Tractatus contra Hæreticos*, *Theologica Regula*, *De Planctu Naturæ*, and *Anticlaudianus*. These are published by Migne, *Patr. Lat.*, Vol. CCX; the edition, however, is uncritical, and includes several treatises the authorship of which is doubtful.² The classic work on Alanus is Baumgartner's *Die Philosophie des Alanus de Insulis* (Münster, 1896).

DOCTRINES

It is incorrect to represent Alanus as a mystic.³ He exhibits, it is true, some of the characteristics of the mystic style, — poetic imagery, allegorical diction, etc. Nevertheless, he attaches independent value to speculative thought, and while he holds that reason cannot comprehend the mysteries of faith, he maintains that authority needs the aid of reason: "Quia auctoritas cereum habet nasum, id est, in diversum potest flecti sensum, rationibus roborandum est."⁴ Instead, however, of presenting an original synthesis of philosophical doctrine, he merely collects and tries to reconcile the doctrines of his contemporaries. It is possible that this eclectic spirit of his teaching was the occasion of the surname *Doctor Universalis* by which he was known. This eclecticism appears

¹ Cf. Migne, *Patr. Lat.*, Vol. CLXXXVI.

² The *Anticlaudianus* and *De Planctu Naturæ* are published in *Rerum Britannicarum Scriptores* (*Satirical Poets of the Twelfth Century*, Vol. II, pp. 268 ff.).

³ Cf. Hauréau, *op. cit.*, I, 521.

⁴ *Tractatus contra Hæreticos*, I, 30.

In his **Psychology**, which is a somewhat bewildering *syncretism of Pythagorean, Augustinian, and Aristotelian doctrines*. Having defined matter as chaotic space, and form as the sum of properties, he cannot admit the Aristotelian doctrine of the union of soul and body. The soul and the body are independent substances united by means of a *spiritus physicus*. The relations of body and soul are regulated by *number*.¹

In his **Cosmology**, which is dominated by the idea of *number as constitutive of order*, Alanus maintained that intermediate between God and creatures is a kind of *world-soul*, — the servant of God, “*Dei auctoris vicaria*.”

Historical Position. Alanus of Lille, Peter the Lombard, and the other writers of this group exhibit a tendency to escape from the dialectical discussions of the schools by taking refuge either in the eclectic position, that all systems are partially true, or in the mystic position, that all purely rational systems are essentially inadequate. The tendency towards mysticism appears more plainly in the writings of the philosophers belonging to the next group.

CHAPTER XXXV

THE MYSTIC SCHOOL ²

Mysticism may mean a tendency of the mind towards the supernatural, or it may mean a science growing out of such a tendency, — a body of doctrine having for its object to determine the mode or manner in which the soul of man is directly united with God in contemplation and love. Mysticism, *as a tendency*, was a characteristic of Neo-Platonism; it reappeared in the philosophy of the Gnostics and in that of Erigena. In

¹ *Anticlaudianus*, 551, A; *Tract. contra Har.*, I, 29.

² Cf. De Wulf, *op. cit.*, p. 217; *Revue d'histoire et littérature religieuses*, Nov.-Déc., 1902, p. 536.

fact, wherever philosophy tended toward pantheism it tended towards mysticism. Thus we find the mystic spirit in the pantheistic systems with which the history of the philosophy of the twelfth century closes. Mysticism, *as a science*, does not appear in systematized form until the first part of the twelfth century, although the principles of orthodox mysticism are contained in the ascetic and exegetical treatises of the Fathers. When, as we have seen, William of Champeaux left Paris (1108), he retired to the abbey of St. Victor and there continued to teach. It was out of this teaching that the mystic movement grew, which during the remainder of the century flourished at that abbey and with which are associated the Victorines, — Hugh, Walter, and Richard. The condemnation of Abelard and the suspicion of heterodoxy incurred by Gilbert strengthened the cause of the mystics, who, from the outset, were opposed to dialectic.

St. Bernard of Clairvaux, *Doctor Mellifluus* (1091–1153), although he belonged to no school of philosophy, lent all the weight of his authority to the cause of mysticism. He was himself an exponent of the principles of mystic theology, teaching that profane science is not to be studied except in so far as it may contribute to the cultivation of the spiritual life. The end and aim of life should be to attain by means of the twelve stages or degrees of humility a contemplative love of God.¹

HUGH OF ST. VICTOR

Life. Hugh of St. Victor was born at Hartingam in Saxony. From 1125 until his death in 1141 he taught at the abbey of St. Victor. He is regarded as the founder of the Victorine school.

Sources. The mystical works of Hugh include *De Arca Noe Morali*, *De Arca Noe Mystica*, *De Vanitate Mundi*, *De Arrha Animæ*, *De Amore*

¹ On St. Bernard, cf. Vacandard, *Vie de S. Bernard* (Paris, 1895), and Storrs, *Bernard of Clairvaux* (New York, 1892). His works are published by Migne, *Patr. Lat.*, Vols. CLXXXII–CLXXXV.

Sponsi ad Sponsam. These are published by Migne, *Patr. Lat.*, Vols. CLXXV–CLXXVII. A special work dealing with the philosophy of the Victorines is Mignon's *Origines de la scolastique*, etc. (Paris, 1895).

DOCTRINES

Hugh taught that the contemplation of invisible essences and causes is the true complement of philosophy. “*Sapientes hujus mundi propterea stulti facti sunt quia soli naturali documento incedentes, exemplaria gratiæ non habuerunt.*”¹ Reason cannot penetrate to the truths of the natural order unless aided by God: “*Ratio per se non sufficit, nisi a Deo adjuta fuerit.*” All knowledge is but the preliminary to the mystic life which leads to God. In this mystic life we must distinguish the *preparative stage* in which the soul engages in soliloquy, etc., *thought (cogitatio)*, by which the soul seeks God in the material world, *meditation (meditatio)*, by which the soul seeks God in the interior of the soul itself, and *contemplation (contemplatio)*, by which the soul is united immediately with God in supernatural intuition.²

Richard of St. Victor, who succeeded Hugh as prior of St. Victor, taught from 1162 to 1173. Under his influence the mystic movement took up a position of more determined hostility to secular learning. The knowledge, Richard declared, of which profane philosophy boasts is nothing but error and vanity: “*Suspecta est mihi omnis veritas quam non confirmat Scripturæ auctoritas.*”³ He observes with pleasure, “*Multi qui prius fabricabant in officina Aristotelis . . . discunt cudere in officina Salvatoris.*”

It was, however, **Walter of St. Victor**, successor of Richard, who carried the mystic disapproval of secular learning to the extent

¹ Quoted by González, *op. cit.*, II, 162. González, however, as Mignon (*op. cit.*, I, 63) has shown, bases his study of Hugh's mysticism on a work falsely attributed to the founder of the Victorine school.

² *De Modo Dicendi et Meditandi*, Cap. 8.

³ *De Preparatione ad Contemplandum*, Cap. 81.

of characterizing dialectic as "the devil's art." He wrote a work entitled *In Quatuor Labyrinthos Franciæ*, in which Abelard, Peter of Lombardy, Peter of Poitiers, and Gilbert de la Porrée (the "four labyrinths") were denounced as heretics because they had treated with "Scholastic levity" the mysteries of the Trinity and the Incarnation. To the same school belonged **Achard** and **Godfrey** of St. Victor.

Historical Position. The mystic school is justly considered to be a reaction against the rationalism of Berengar, Roscelin, and Abelard. The Victorines were at first willing to assign to human reason its legitimate scope in philosophy and theology; later, however, they made common cause with the *Cornificians* and opposed all profane learning, thus running counter to the Scholastic movement. Among those whom they condemned for using dialectical reasoning was Peter of Lombardy, the intellectual precursor of the greatest of the schoolmen of the Golden Age of Scholasticism.

Mysticism has, nevertheless, a recognized place in the history of the Scholastic movement: it represents an important phase of the Neo-Latin civilization of which Scholasticism is a product. To the *Credo ut intelligam* and the *Intelligo ut credam*, the mystics added a third principle, *Amo ut intelligam*, — a principle which should not be neglected in a complete synthesis of the spiritual and emotional elements of human life, especially if human life be viewed, as it was viewed in the Middle Ages, in relation to the other world as well as to this.

Mysticism was necessarily imaginative rather than rational. The Neo-Platonic concept of the world harmonized the elements of mysticism better than the Aristotelian concept could have done. It is these elements — imaginativeness and Neo-Platonism — that determine the tendency of mysticism towards pantheism.

CHAPTER XXXVI

THE PANTHEISTIC SCHOOL¹

The pantheism which appeared in the schools towards the end of the twelfth century was the outcome of many influences, of which the most important were the realistic Platonism of the school of Chartres, the natural drift of mysticism towards pantheism, the growing influence of Arabian speculation, and the revival of the study of Erigena's *De Divisione Naturæ*.

Bernard of Tours (*Bernardus Silvestris*), who lived during the second half of the twelfth century, composed a work *De Mundi Universitate*,² which he dedicated to Theodoric of Chartres, thus indicating the affiliation of the first form of pantheism which appeared in the twelfth century to the school of Chartres. The work is an attempt at deducing a cosmic system from a *monad* by means of the doctrine of *emanation*. In method and manner it recalls the treatises of the Neo-Pythagoreans of Alexandria.

AMAURY OF BÈNE

Life. Amaury (or Amalric) of Bène, or of Chartres, taught theology and dialectic at Paris during the second half of the twelfth century. After his condemnation in 1204, he was obliged to retire from Paris. His books were destroyed, and the date of his death is unknown. The birthplace of Amaury (which is near Chartres) suggests the early influence of the members of the school of Chartres, and it is now almost universally conceded that during the last decades of the twelfth century the works of Erigena were so widely known that it is natural to suppose that Amaury was acquainted with Erigena's doctrines.³

¹ Cf. Jundt, *Histoire du panthéisme au Moyen Age* (Paris, 1875).

² This work was published by Barach under the title *Bernardi Silvestris De Mundi Universitate, sive Megacosmos et Microcosmos* (Innsbruck, 1876), and was ascribed (wrongly, as Clerval has shown) to Bernard of Chartres.

³ Cf. *Chartularium Universitatis Parisiensis*, edd. Denifle et Chatelain (Paris, 1889 ff.), I, 107.

Sources. In the absence of primary sources, it is necessary to have recourse to secondary authorities. Chief among these is *Gerson* (1363-1429).

DOCTRINES

Stöckl, relying on Gerson's account, attributes to Amaury the following doctrines:

1. *Identity of creature and Creator*: "Cum in Ipso sint omnia, imo Ipse sit omnia . . . non facile posse negari Creatorem et creaturam idem esse."¹

2. *Substantial unity of all things*: "Omnia esse unum. Deum esse essentiam omnium creaturarum et esse unum."²

3. Realism, based on *identity of specific nature*: "Alterius naturæ non est Abraham et alterius Isaac, sed unius et ejusdem."³

This account, given by Gerson, is confirmed by the testimony of the Council of Paris (1210) at which Amaury was condemned, and by the work *Contra Amaurianos*, written about 1208, against the followers of Amaury, who seem to have been numerous at that time.

Associated with Amaury is *Joachim de Floris* (died 1202), who is referred to by St. Thomas and Albertus Magnus as maintaining "Essentia genuit essentiam."⁴ Consult Denifle, *Archiv*, I, 50 ff.

DAVID OF DINANT

Life. David of Dinant seems to have evolved his doctrine of pantheism independently of the influence of Amaury and of the school of Chartres. He drew largely from Arabian sources. Denifle publishes⁵ a text in which Albertus Magnus refers to a certain Alexander as the man from whom David derived his heresy. It is more probable that it was Dominic Gundisalvi who made David conversant with the literature of Arabian pantheism. It is certain at all events that David studied the philosophy of Erigena.

¹ Gerson, *Opera* (Hague, 1728), Vol. IV, p. 826.

² *Ibid.*

³ *Ibid.*

⁴ St. Thomas, *Sum. Theol.*, I^a, XXXIX, 5; Albertus Magnus, *Sum. Theol.*, P. I, Tract. VII, Q. XXX, Memb. 3, Art. 1.

⁵ *Chartul.*, I, 71.

Little is known of the life of David of Dinant. It is uncertain whether he was born at Dinan in Brittany or at Dinant in Belgium.

Sources. David wrote a work, *De Tomis, seu de Divisionibus*, and a collection entitled *Quaternuli* (little notebooks). In the council held in Paris in 1210, at which the doctrines of David were condemned together with those of Amaury, both the above-mentioned works were proscribed. Denifle¹ publishes a portion of one of the statutes referring to the *Quaternuli*.

Our secondary sources are Albertus Magnus, who was almost a contemporary of David, and St. Thomas.

DOCTRINES

According to St. Thomas,² David *identified God with primal matter*. "Tertius (error) fuit Davidis de Dinando qui stultissime posuit Deum esse materiam primam." This is perhaps the only instance in which the Angelic Doctor so severely characterizes an opponent or an opponent's opinion. The explanation of the unusual severity lies perhaps in the fact that the doctrine in question—a tenet common to the pantheists of the East—was the fundamental principle of the materialistic pantheism which was so formidable a foe of Christian theism in St. Thomas' day. Elsewhere³ St. Thomas tells us that, according to David, there are three categories of Being, *eternal separate substances, souls, and bodies*, and that these three are essentially one:

Divisit enim res in partes tres, in corpora, animas et substantias separatas. Et primum indivisibile ex quo constituuntur corpora dixit *Yle*; primum autem indivisibile ex quo constituuntur animæ dixit *Noym*, vel mentem; primum autem indivisibile in substantiis æternis dixit *Deum*. Et hæc tria esse unum et idem; ex quo iterum consequitur *esse omnia per essentiam unum*.

Albertus Magnus gives a similar account of David's doctrines.⁴

¹ *Op. cit.*, I, 70.

² *Sum. Theol.*, I^a, III, 8 c.

³ *In II^{um} Sententiarum*, Dist. XVII, Q. I.

⁴ *Cf. Sum. Theol.*, P. II, Tract. IV, Q. XX; Tract. XII, Q. LXXII.

Historical Position. From what we know of the doctrines of the pantheists of the twelfth century and of the influences then at work on the study of philosophy, it is evident that the pantheism of David and Amaury was regarded as the logical consequence of the study of the Aristotelian treatises on physics and metaphysics which were introduced about this time in translations from the Arabic. This association of Aristotle with pantheism explains the action of the ecclesiastical authorities who, at the Council of Paris (1210) and on several subsequent occasions, condemned Aristotle or ordered his works to be corrected. The thirteenth century discovered in Aristotle the champion of theism instead of the advocate of pantheism. Before, however, we enter upon the study of the philosophy of the thirteenth century it will be necessary to give an outline of the development of thought among the Byzantines, Arabians, and Jews, for from them was derived the distorted Aristotelian tradition which was at first regarded as a part of Aristotle's teaching and which led to his condemnation by the ecclesiastical tribunals.

Retrospect. The second period of the history of Scholastic philosophy is virtually comprised within the twelfth century. It was a period of growth, but it was also a period of struggle. The twelfth century witnessed what may be called the *storm and stress* of Scholasticism; for in that century were brought to bear on the Scholastic movement all the anti-Scholastic forces which the old civilization had handed down or the new civilization had developed. On the one hand, the rationalists brought discredit on philosophy as well as on theology; on the other hand, the over-enthusiastic advocate of mysticism and the over-timorous defender of orthodoxy found in the heresies of Roscelin and Abelard a pretext for carrying their suspicion of the dialecticians to the point of active hostility. The pantheism, which could be so easily traced to the influence of the school of Chartres, was cited as a terrible example of the effect of

profane learning. The twelfth century, however, was an age in which the genuine representatives of the Scholastic movement knew how to defend themselves. They were strong with the vigor of youth, and, believing in the justice of their cause, they successfully repelled every attack, so that out of the struggles which the twelfth century witnessed there came forth a victorious Scholasticism prepared for the great constructive task to be accomplished in the following century. The results achieved by Scholasticism in the second period of its history include: (1) the success of the anti-realists; (2) the recognition of the Scholastic method as a legitimate method in philosophy and theology; (3) the establishment of a broader spirit of culture, of a "humanism" which admitted that the Neo-Latin civilization had much to learn from the civilizations of Greece and of the Orient. These results will appear in the writings of the first schoolmen of the third period.

BYZANTINE, ARABIAN, AND JEWISH PHILOSOPHY

BYZANTINE PHILOSOPHY

Hellenistic philosophy, banished from Athens by Justinian (529) and driven from Alexandria by the Arabs (640), was perpetuated at Constantinople by an irregular and intermittent tradition which, after the great schism (858) that separated the East from the West, took the form of commentary on and exposition of the works of Plato and Aristotle. **Michael Psellus** (the elder) and **Photius**¹ are the chief representatives of this tradition in the ninth century; **Arethas**, **Nicetas** the Paphlagonian, and **Suidas** represent it in the tenth century; **Michael Psellus** (the younger) is the sole representative of Byzantine learning in the eleventh century; **Johannes Italus**, **Anna Comnena**, daughter of the Emperor Alexis, and **Michael Ephesius** brought Byzantine learning to its highest degree of development in the twelfth century; finally, **Nicephorus Blemmydes** and **George Pachymeres** are the best known of the Byzantine scholars of the thirteenth century, the age in which the learning of Constantinople made its first impression on the

¹ Cf. Migne, *Patr. Graeca*, Vols. CI-CIV.

Scholastic movement.¹ Although the influence of the learning of Constantinople on the progress of philosophic thought in western Europe may be said to begin with the first Crusade (1096–1100), yet it was not until the taking of Constantinople by the Crusaders in 1204 that the treasures of ancient Greek literature and philosophy were thrown open to the schoolmen. The debt which Scholasticism owes to Byzantine learning should not be exaggerated; at the same time we must not underrate the importance of the introduction of the original and complete works of Aristotle into western Europe at a time when the Aristotle of the Arabians was being invoked as the champion of pantheism and rationalism.

ARABIAN PHILOSOPHY

The Arabians received Aristotle's works from the Syrians and Persians, who in 529 gave shelter to the philosophers banished from Athens by Justinian. The most important of the translators and commentators who made Aristotle and Plato intelligible to these Oriental peoples are **David the Armenian** (sixth century), the Nestorian Christians of the schools of Edessa and Chalcis (fifth and sixth centuries), and **Honain ben Isaac**, who, in the ninth century, began a series of translations from Syriac into Arabic. It is, therefore, beyond dispute that the Arabians owe their knowledge of Greek philosophy to the Syrian Christians.

Sources. The classic works on Arabian philosophy are: Munk, *Mélanges*, etc. (Paris, 1859); articles by Munk in the *Dictionnaire des sciences philosophiques*; Renan's *De Philosophia peripatetica apud Syros* (Paris, 1852), and his *Averroès et l'Averroïsme* (Paris, 1869). To the bibliography given by Weber (p. 211) and Ueberweg (p. 406) add M. Forget's articles in *Néo-Scholastique* (1894), Figuier, *Vies des savants du Moyen Âge* (Paris, 1883), and De Vaux, *Avicenne* (Paris, 1900).

SKETCH OF SYSTEMS OF PHILOSOPHY AMONG THE ARABIANS

Speculative thought among the Arabians passed through the following phases:

1. *Primitive unquestioning belief in the Koran.* From the middle of the seventh century until the middle of the eighth, the authority of the Koran was supreme among the followers of Mahomet.

¹ Cf. Krumbacher, *Geschichte der Byzantinischen Litteratur* (Munich, 1897).

2. *Motazilites, or dissidents.* This sect represented a rationalistic movement against the orthodox fatalism and anthropomorphism, — a movement occasioned by the contact (A.D. 750) of the Mussulman with the civilization of Persia, Babylonia, and Assyria.

3. *Motacallimin, or professors of the word.* These were the first theologians of Islam. In their effort to expound the Koran rationalistically, and yet without exceeding the limits of orthodox belief, and in the use which they made of the philosophy of the Greeks, they resemble the schoolmen of Christian Europe. The Motacallimîn received encouragement and patronage from the Abbassides, who began to rule as caliphs about the year 750.

4. *Sufis, or mystics.* These represented a more extreme phase of the theological reaction against rationalism. They flourished chiefly in the Persian portion of the Arabian empire. Distrusting reason and philosophy, they taught that the only source of truth is the Koran, and that the reading of the Koran is to be supplemented by ecstatic contemplation.

5. *Philosophers.* The philosophical movement among the Arabians extended from the ninth century to the end of the twelfth. The philosophers were, in a sense, the continuators of the dissident movement. As a rule, they disregarded the authority of the Koran, and built their systems of philosophy upon lines traced by the Greeks, whose works they obtained from the Syrian Christians. They were opposed by the mystics and persecuted by the caliphs both in Asia and in Europe.

The chief philosophers are: (1) *Among the Arabians of the East*, **Alkendi** (died 870), **Alfarabi** (died 950), **Avicenna** (Ibn Sina) (980–1037), and **Algazel** (1059–1111); (2) *Among the Arabians of the West*, that is, in Spain, **Avempace** (died 1138), **Abubacer** (1100–1185), and **Averroës** (Ibn Roshd) (1126–1198).

Avicenna, physician, philosopher, and theologian, was born in the province of Bokhara. He composed a medical *Canon* and numerous philosophical works in which he expounded the doctrines of Aristotle and of his Greek commentators. He devoted special attention to *metaphysics*, maintaining the existence of a Sovereign Intelligence as the highest reality, and of matter, or the non-existent, as the lowest in the scale of being. The first emanation from the Supreme Intelligence is the active intellect, to which Avicenna assigns a metaphysical as well as a psychological rôle, teaching that it is the source of all heavenly and earthly intellects, and that it is the principle by which the potentially intelligible becomes actually intelligible to the human mind.¹

¹ St. Thomas, *Contra Gentiles*, II, 42; *Opusculum De Substantiis Separatis*, Cap. 10. Cf. *Archiv f. Gesch. der Phil.*, X, 2 (January, 1904).

Despite these Neo-Platonic principles, Avicenna maintained the Aristotelian doctrine of sensation and the moderate realistic doctrine of universals. The latter he expressed in the formula so often quoted by Albert and other schoolmen: "Intellectus in formis agit universalitatem." His definition of the soul¹ is identical with Aristotle's: "Completa definitio animæ est perfectio prima vel actus primus corporis organici." Still, he returns to Neo-Platonic principles in his account of the origin of intellectual knowledge, as when² he teaches that intelligible species are acquired in two ways: by rational discourse, or demonstration, and by infusion ("infusio vel manatio divina").

Both St. Thomas and Albertus Magnus ascribe to Avicenna the doctrine of the unity and transcendency of the *active intellect*. The former says:³ "Intellectum agentem ponit Avicenna quandam substantiam separatam," and⁴ "Avicenna ponit quod intellectus agens est unus in omnibus, quamvis non intellectus possibilis."

Historical Position. Avicenna was the first of the Arabians of the East to depart from the Neo-Platonic interpretation of Aristotle. The remnant of Neo-Platonism in his system of philosophy is proof of his inability to escape altogether from the influence of his predecessors. Averroës, who represents the Arabian philosophy of the West, looked upon Avicenna as a materialistic pantheist; Algazel and other mystics regarded him as a rationalist; and many of the schoolmen spoke of him as the first of the mediæval Occasionalists.

Averroës was born in the year 1126 at Cordova. His career, like that of Avicenna, shows the bitterness of the intolerance prevailing among the followers of Islam, inclined as they were to side with the mystics, whom they regarded as orthodox, rather than with the philosophers, whom they suspected of hostility to the Koran. Like Avicenna, too, he was a physician. Exiled to Morocco on account, it is said, of his political doctrines, he died there in the year 1198. Averroës was regarded as the greatest of all the Arabian commentators of Aristotle. He composed besides his commentaries several treatises on astronomy, medicine, and philosophy, and also a controversial work, *Destructio Destructionis*, in answer to Algazel's *Destructio Philosophorum*. His admiration for Aristotle knew no bounds. "Aristotelis doctrina," he says, "est summa veritas, quoniam ejus intellectus fuit finis humani intellectus."⁵

¹ *De Anima*, II, fol. 5. This and following quotations from the works of the Arabians are given by Stöckl, *Gesch. der Phil. des Mittelalters*, II, 25 ff.

² *Op. cit.*, VIII, fol. 23.

⁴ *Op. cit.*, II, 76.

³ *C. G.*, II, 74.

⁵ *Proæmium in Aristotelis Physica*.

In *logic* Averroës limits himself to the task of commenting on Aristotle's *Organon*. He adopts Avicenna's formula, "Intellectus in formis agit universalitatem." Science, he teaches, treats of individual things under the form of universality which the intellect abstracts.¹

Metaphysics. Matter and form are the principles of being. Matter is not to be conceived as identical with not-being. It is the eternal potency out of which the First Mover extracted (*extractio* is to be substituted for *creatio*) the successive forms, or forces, which determine matter to different modes of existence.²

Heavenly bodies are endowed with a more excellent kind of form than are terrestrial bodies. The Prime Mover imparts motion to the celestial sphere, which in turn moves the planetary spheres. The mover of the sphere of the moon is the active intellect.³

Psychology. The most characteristic of Averroës' psychological doctrines is that of the unity of the active intellect. Whenever Aristotle speaks of the intellect as separate from matter or unmixed with matter, Averroës understands him to mean that the power by which the potentially intelligible is rendered actually intelligible is physically and topically separate from the body and is numerically one and common to all men. The passive intellect, which Averroës calls the material intellect, is also one: "Possumus opinari intellectum materialem esse unicum in cunctis individuis."⁴ In the context of the passage just quoted, the active and passive intellects are called parts of the same intellect. Still, in a certain sense, it is true that there are as many intellects as there are individuals, for the separate intellect is communicated to the individual soul, just as the light, while remaining one, is communicated to the multiplicity of objects which it illuminates.⁵ This communication is described as *continuatio* or *copulatio*, and the schoolmen understood Averroës to mean that the continuation of the individual soul with the transcendent intellect takes place by means of the phantasmata of the sensitive soul.⁶

It is evident from this doctrine that, according to Averroës, the individual soul contains nothing superior to matter, and is, therefore, corruptible. The

¹ *Compendium Metaphysicæ*, Tract. II.

² Cf. *Destructio Destructionis*, Disp. 1.

³ "Intellectus autem agens ordinatur ex ultimo horum in ordine et ponamus ipsum esse motorem orbis Lunæ." *Compend. Metaph.*, Tract. IV.

⁴ *De An.*, fol. 165.

⁵ *Destr. Destr.*, Disp. 1, dubium 8.

⁶ Cf. St. Thomas, *C. G.*, II, 73; III, 43; also, *Opusculum De Unitate Intellectus contra Averroistas*. Cf. Albert, *De Natura et Origine Animæ* and *De Unitate Intellectus contra Averroem*.

impersonal intellect is immortal; but there is no personal immortality. Nevertheless, Averroës apparently believed in *personal* immortality. St. Thomas represents him as saying: "Per rationem concludo de necessitate quod intellectus est unus numero, firmiter tamen teneo oppositum per fidem."¹ The distinction to which allusion is made in this quotation was adopted by the Averroists of the fourteenth and fifteenth centuries, when they maintained, in opposition to the fundamental principles of Scholasticism, that *what is true in philosophy may be false in theology, and vice versa.*

Historical Position. Averroës was known as the commentator of Aristotle. He intended, no doubt, to reproduce as faithfully as he could the doctrines of the Stagirite. He did not, however, succeed in breaking with the pantheistic and rationalistic tradition of the Moorish schools; indeed, he emphasized in his commentaries those points of Aristotle's teaching which were opposed to Christian dogma, so that St. Thomas was obliged to judge him "non tam Peripateticus quam Peripateticæ philosophiæ depravator."

JEWISH PHILOSOPHY

Authorities. In addition to Munk's *Mélanges* and Frank's *La Cabale*, etc. (Paris, 1843), Max Docteur's *Die Philosophie des Josef (ben) Zaddik* (Münster, 1895), Baeumker's edition of Avicbrol's *Fons Vitæ* (Münster, 1892), and Guttman's *Die Scholastik des XIII Jahr. in ihren Beziehungen zum Judentum* (Breslau, 1902) may be mentioned as authorities on the history of Jewish philosophy.

The Jews, before their contact with Arabian civilization, developed a system of mystic philosophy based upon the cabalistic *Şephiroth*, or mystic numbers. It was, however, after they had come in contact with the Arabians in the East and in the Moorish kingdom, that Greek learning passed from the mosque to the synagogue, and the systems of philosophy were developed which influenced the course of Christian thought during the thirteenth century.

Avicbrol (1020-1070) was born at Malaga. His real name was Salomon ben Gabirol, the name Avicbrol being the Latinized form of what was supposed to be an Arabian name. Indeed, it was only in recent times that the nationality of this philosopher was determined with certainty. His principal work, *Fons Vitæ*, was probably composed in Arabic; Munk found a Hebrew copy of the work, and quite recently the Latin translation, made about the beginning of the twelfth century, has been published.²

¹ *Opusc. XXII*, p. 491.

² *Avicbrolis Fons Vitæ*, ed. Baeumker (Münster, 1892).

Avicbrol's philosophy is a blending of Jewish religious doctrines with the doctrines of the Neo-Platonists. The importance attached to contemplation, and to a striving towards union with the divine, the doctrine of the preëxistence of the soul, of knowledge by means of reminiscence, of the eternity of matter, — all these are evident signs of Neo-Platonic influence.

The most characteristic of Avicbrol's tenets is the doctrine ascribed to him by Albertus Magnus¹ and St. Thomas,² that all things finite, whether corporeal or incorporeal, are composed of matter and form; that *matter* is, consequently, the *substratum of all finite existence*.³

González⁴ calls attention to the similarity existing between Avicbrol's doctrine of universal matter and the doctrines of Duns Scotus regarding *materia primo-prima*. Indeed, all the first Franciscan masters maintained that matter is coextensive with finite being.

Moses Maimonides (1135–1204), who was born at Cordova in 1135 and died at Cairo in 1204, was the greatest of the Jewish Aristotelians. His philosophical treatise, entitled *Guide of the Doubting*, is an exposition of Aristotelian philosophy combined with Jewish religious teaching: "Intentio hujus libri," he says, "est docere sapientiam legis secundum veritatem et ex fundamentis."⁵

Moses departs from the teaching of Aristotle whenever he considers that Jewish dogma is opposed to Peripatetic philosophy. He maintains, for instance, that the world is not eternal, except in the sense that it proceeds by natural necessity from its cause which is eternal. He is willing, however, to grant that the eternity of the world is *possible*, although he does not agree with the Aristotelians who hold that it is *necessary*. In treating of the immortality of the soul, he cites passages from the Bible, quotes the opinions of the Greek and Arabian commentators, distinguishes between the *soul* that is born with us, and the *intellect* which is acquired, and ends by asserting that only the souls of the just are immortal.⁶ This doctrine of *acquired immortality* became one of the most distinctive doctrines of the Jewish school.

Historical Position. Although less original than Avicbrol, Maimonides was destined to exercise a more profound influence on succeeding generations of philosophers. To him may be traced the scientific movement which manifested itself among the Jews of the thirteenth and the two following centuries, and he is commonly regarded as the one who, of all the Jewish thinkers, contributed most to the system of Spinoza.

¹ *Summa Totius Theologiæ*, I, 4, 22.

⁴ *Op. cit.*, II, 486.

² *Quæstio Disputata De Anima*, Art. 6.

⁵ Preface to *Guide*.

³ Cf. *Fons Vitæ*, V, 21.

⁶ *Guide*, etc., trans. by Munk, Vol. II, 205.

Anonymous Works. There were three works of doubtful authorship, which, on being translated from Arabic into Latin, became for the schoolmen common sources of information concerning Arabian, Jewish, and even Greek philosophy: (1) The *Secretum Secretorum*, a scientific miscellany, attributed to Aristotle; (2) *Theologia Aristotelis*, or *De Secretiori Ægyptiorum Philosophia*, which was sometimes attributed to Aristotle, but which is in reality a collection of excerpts from the *Enneades* of Plotinus; (3) *Liber de Causis*, which, under various titles, was ascribed to Aristotle, to St. Augustine, to Avempace, and to Gilbert de la Porrée. Albertus Magnus and St. Thomas decided against its Aristotelian authorship, the former ascribing it to a certain Jew named David, the latter judging it to be an Arabian compilation of a work by Proclus.¹ The preponderance of evidence is in favor of St. Thomas' opinion.

INFLUENCE OF ARABIAN AND JEWISH PHILOSOPHY ON SCHOLASTICISM

The influence which Arabian and Jewish learning exercised on the schoolmen of the thirteenth century was very great. It was the Arabians and Jews who gave the first impulse to the study of the physical and metaphysical works of Aristotle. We must not, however, exaggerate the debt which Christian philosophy owes to the Arabians and Jews; we must remember that:

1. Although the first translations which brought Greek philosophy within the reach of the schoolmen were made from the Arabic, these, as we shall see, were soon followed by the more accurate translations made from the Greek.

2. If Christian Europe owes its knowledge of Aristotle to the Arabians, the Arabians themselves owe their knowledge of Aristotle to the Christian scholars of Syria.

3. Although the Arabians contributed largely to the growth and development of the study of medicine in Europe, and although their contributions to mediæval geography, astronomy, arithmetic, and chemistry were also important, yet in philosophy they

¹ Cf. Bardenhewer, *Die pseudo-aristotelische Schrift über das reine Gute* (Freiburg im B., 1882), p. 41.

exercised only an indirect influence. They provoked discussion and controversy ; but to their direct influence not a single important tenet of Scholasticism can be traced.¹ The Scholastic movement was a creation of the Christian mind ; Arabian philosophy was always anti-Christian in spirit and teaching. The impulse that *made* Scholasticism originated with the Carolingian renaissance. The movement was continued by Erigena, Gerbert, Roscelin, Anselm, and other Christian thinkers ; and received new force from the introduction of the physical and metaphysical works of Aristotle. Scholastic philosophy owes nothing to the Arabians except what they contributed to the introduction of these works.

The influence of the Jews was more important than that of the Arabians. The Jews of Moorish Spain enjoyed a large measure of liberty, and among them philosophy found a home when Arabian philosophers were persecuted and their works consigned to the flames. Among the Jews and in the Jewish schools the works of the Greeks and of the Arabians were preserved, translated into Hebrew, and handed over to the Christian scholars, who in turn translated them into Latin. In this way the influence of the Arabians, restricted as it was, was chiefly exercised through the literature and philosophy of the Jews.

THIRD PERIOD OF SCHOLASTICISM

Alexander of Hales to Ockam (1200–1300)

The second period in the history of Scholastic philosophy was the period of storm and stress ; the third is the period of relative perfection — the Golden Age of Scholasticism. The twelfth century was a century of criticism and controversy ; the thirteenth

¹ Exception must be made in favor of Avicenna, whose *Fons Vitæ* had a direct influence on the Franciscan school. Cf. Wittmann, *Die Stellung des heil. Thomas von Aquin zu Avicenna* (Münster, 1900), pp. 15 ff.

is a century of synthesis and construction. The great masters of Scholastic thought in the thirteenth century take as lively an interest in the problem of universals as Roscelin and Abelard did ; they have all Abelard's relish for the use of dialectic, without any of his frivolous love of display ; they are not less appreciative of the value of piety and contemplation than the Victorines were ; they are as keenly alive to the advantages to be gained from the learning of the Greeks and Arabians as were the members of the school of Chartres ; in a word, they neither despise nor neglect what their predecessors accomplished, but, going beyond the limits which circumstances set to the speculations of their predecessors, they carry the Scholastic idea and the Scholastic method into new regions of inquiry and succeed in constructing the great Scholastic systems of metaphysics and psychology. The schoolmen of the thirteenth century are not, like their predecessors, condemned to work and think in a *milieu* unfavorable to constructive speculation. The time is ripe for vast constructive attempts. From the union of the Latin and German races there has sprung up a new Europe, dominated everywhere by Christian ideals ; the new civilization has reached its complete development, and the time has come for Christian thought to put forth its best efforts.

There were three events which more than any others influenced the development of Christian thought at the beginning of the thirteenth century : the introduction of the works of Aristotle, the rise of the universities, and the foundation of the mendicant orders.

INTRODUCTION OF THE WORKS OF ARISTOTLE

Authorities. A. Jourdain, *Recherches sur l'age et l'origine des traductions latines d'Aristote* (2me éd., Paris, 1843) ; Mgr. Talamo, *L'Aristotelismo della Scolastica* (1873) ; Launoy, *De Varia Aristotelis in Academia Parisiensi Fortuna* (ed. at Wittenberg in 1820) ; Brother Azarias, *Aristotle and the Christian Church* (in *Essays Philosophical*, Chicago, 1896).

The schoolmen of the eleventh and twelfth centuries were, for the most part, acquainted with Aristotle merely as a master of dialectic. Indeed, it was not until the time of John of Salisbury that even the *Organon* was known to Christian philosophers in its entirety. It is true that some of the physical doctrines of Aristotle were known to the members of the school of Chartres, but it was only at the beginning of the thirteenth century that all the physical, metaphysical, and ethical treatises of Aristotle were translated into Latin and became part of the library of the schoolmen.

The first translations were made *from the Arabic*, probably through the medium of the Hebrew. The work of translating, begun in the eleventh and twelfth centuries by **Constantine the African**, **Adelard of Bath**, and **Herman the Dalmatian**, was systematized between the years 1130 and 1150 by **Raymond**, bishop of Toledo, who founded a college of translators. To this college belonged **John Avendeath** (Johannes Hispanus), **Dominicus Gundisalvi**, **Alfred de Morlay**, **Gerard of Cremona** (1114-1187), and, at a later time (about 1230), **Michael Scott**¹ and **Herman the German**. The translations, as has been said, were often made through the medium of Hebrew. This is true of the translations of commentaries and possibly also of the translations of the text of Aristotle's works. Renan² says of the commentaries of Averroës, "The printed editions of his works are a *Latin translation of a Hebrew translation of a commentary made upon an Arabic translation of a Syriac translation of a Greek text*."

The translations made directly from the Greek are, as a rule, of later date than the translations from the Arabic. Before the year 1215 or 1220 none of Aristotle's works except the *Organon* was translated from the Greek. It was after the year 1240 that **Robert Greathead** (1175-1253)³ translated Aristotle's *Ethics*, and **Henry of Brabant** and **Thomas of Cantimpré** translated some other portions of Aristotle's works. About 1260 **William of Moerbeka**, at the request of St. Thomas, and, as it appears, of Urban IV, translated the complete works of Aristotle into Latin. This version, known as the "translatio nova," imperfect as it was, held its place as the authoritative translation of Aristotle till the dawn of the era of the Renaissance, although it is evident that in St. Thomas' time there were several other translations in use.

In the light of the foregoing facts the attitude of the Church towards the study of Aristotle's works is seen to be perfectly consistent. When, in 1210,

¹ Cf. Jourdain, *Recherches*, etc., pp. 124 ff.; Renan, *Averroës*, etc., p. 205, and *Chartul.* (ed. Denifle), I, 105, 110.

² *Op. cit.*, p. 52.

³ Cf. F. S. Stevenson, *Robert Grosseteste* (London, 1899).

the provincial Council of Paris, which condemned the doctrines of Amaury and David of Dinant, prohibited the reading of Aristotle's works and the commentaries thereon ("nec libri Aristotelis de naturali philosophia nec commenta legantur Parisiis publice vel secreto"), the prohibition was directed against the Arabian translations rendered into Latin and against the Arabian commentaries. When, in 1215, Robert of Courçon, the papal legate, drew up the statutes for the guidance of the masters of the University of Paris, and therein forbade the reading of the physical and metaphysical treatises, the regulation once more referred to the Arabian Aristotle. When, in 1231, Gregory IX directed that the *libri naturales* be expurgated of errors, it was a sign that the true Aristotle was beginning to be distinguished from the false, and, indeed, in 1254 we find the writings of Aristotle prescribed by the Faculty of Arts as text-books for the masters' lectures in the University of Paris. The Aristotle that was twice condemned was professedly hostile to Christianity. To the controversies of former centuries Aristotle had contributed merely the weapons of dialectical debate: but as soon as translations were made from the Arabic, and Arabian commentaries were appended to them, Aristotle's works were made to yield material for a new rationalism and a new pantheism essentially hostile to Christian faith and to theism. When, however, translations were made from the Greek text, it became clear that Peripateticism and Scholasticism were by no means hostile to each other; and from the time of Alexander of Hales onward Aristotle's philosophy was made the basis of a rational exposition of dogma: Aristotle became for the schoolmen what Plato had been for the Fathers, — "præcursor Christi in naturalibus."

RISE OF THE UNIVERSITIES

Authorities. For the history of the University of Paris, with which we are chiefly concerned here, the authorities, besides Du Boulay's *Historia Universitatis Parisiensis* (a very uncritical work), are Denifle's *Chartularium Universitatis Parisiensis* (1889-1891) and *Die Entstehung der Universitäten des Mittelalters bis 1400* (1885); Rashdall's *Universities of Europe in the Middle Ages*, Vol. I (Oxford, 1895); Laurie's *Lectures on Rise, etc., of Universities* (London, 1886), a work not always reliable; Feret's *La faculté de théologie de Paris* (Paris, 1894); and articles in *Catholic University Bulletin*, July, October, 1895.¹

The event which is now universally admitted as the starting point of the history of the University of Paris is the union of the masters and students of

¹ Vol. I, pp. 349 ff. and 493 ff.

the schools in the island into a corporation (*Universitas Magistrorum et Scholarium*) under the presidency of the chancellor of the cathedral. This event took place about the end of the twelfth century. During the first decades of the thirteenth century the *faculties* were organized. About the same time the *nations* were organized among the students and the masters of the faculty of arts, and a struggle began between the rector of the nations and the chancellor of the university.¹ Privileges bestowed both by the popes and the French kings extended the influence and prestige of the university; Paris became the "city of books," the center of the intellectual life of Christian Europe, and the scene of the greatest triumphs of Scholasticism. It was at Paris all the great masters studied and taught, and so intimately is the history of Scholastic philosophy connected with the University of Paris, that to understand the conditions in which Scholasticism attained its highest development it is necessary to know something of the arrangements made for the study of philosophy at the university.

By statutes issued at various times during the thirteenth century it was provided that the professor should *read*, that is, expound, the text of certain standard authors in philosophy and theology. In a document published by Denifle,² and by him referred to the year 1252, we find the following works among those prescribed for the Faculty of Arts: *Logica Vetus* (the old Boethian text of a portion of the *Organon*, probably accompanied by Porphyry's *Isagoge*); *Logica Nova* (the new translation of the *Organon*); Gilbert's *Liber Sex Principiorum*; and Donatus' *Barbarismus*. A few years later (1255), we find the following works prescribed: Aristotle's *Physics*, *Metaphysics*, *De Anima*, *De Animalibus*, *De Cælo et Mundo*, *Meteorica*, the minor psychological treatises, and some Arabian or Jewish works, such as the *Liber de Causis* and *De Differentia Spiritus et Anima*.³ The first degree for which the student of arts presented himself was that of bachelor. The candidate for this degree, after a preliminary test called *responsiones* (this regulation went into effect not later than 1275), presented himself for the *determinatio*, which was a public defense of a certain number of theses against opponents chosen from the audience. At the end of the disputation, the defender summed up, or "determined," his conclusions. After determining, the bachelor resumed his studies for the licentiate, assuming also the task of "cursorily" explaining to junior students some portion of the *Organon*. The test for the degree of licentiate consisted in a *collatio*, or exposition of several texts, after the manner of the masters. The student

¹ Chartul., I, xi.

² *Op. cit.*, I, 227.

³ Cf. *op. cit.*, I, 279, note 10. The work *De Differentia Spiritus et Anima* was published by Barach, Innsbruck, 1878.

was now a licensed teacher; he did not, however, become *magister*, or master of arts, until he had delivered what was called the *inceptio*, or inaugural lecture, and was actually installed (*birrettatio*). If he continued to teach he was called *magister actu regens*; if he departed from the university or took up other work, he was called *magister non regens*. It may be said that, as a general rule, the course of reading was: (1) for the bachelor's degree, grammar, logic, and psychology; (2) for the licentiate, natural philosophy; (3) for the master's degree, ethics, and the completion of the course of natural philosophy.¹

THE MENDICANT ORDERS

The University of Paris owed its origin to the union of the cathedral schools, which were in charge of the diocesan clergy. Soon, however, the two great orders, the Dominicans and the Franciscans, were founded, and began to revive in their monasteries the best traditions of the Benedictine cloister schools of former centuries. On the occasion of the great dispersion of 1229, when, after having had recourse to a *cessatio*, or suspension of lectures, the masters left the city, as a protest against the infringement of their privileges, the Dominicans obtained a license to establish a chair in the convent of St. James. After the return of the secular masters, in 1231, the Dominican master was allowed to continue his lectures. In the same year the Dominicans secured another chair, and the Franciscans obtained their first chair in the university, Alexander of Hales being installed as the first Franciscan master.² In 1252 or 1253, under circumstances very similar to those of 1229, the great body of masters once more proclaimed a *cessatio*, and a struggle between the "regulars" and "seculars" was precipitated by the refusal of the regular professors to leave their chairs or to swear obedience to the statutes of the university. This controversy was still raging in 1257, when St. Thomas presented himself for his solemn *inceptio* as master in theology. William of St. Amour was the champion of the seculars, while St. Thomas and St. Bonaventure advocated the cause of the regulars.³

¹ Cf. Rashdall, *Universities of Europe in the Middle Ages*, I, 437.

² Cf. *Chartul.*, I, 135, n.

³ The status of the mendicants was defined in the bull *Quasi lignum vite* (1255; *apud* Denifle, *Chartul.*, I, 279), which settled practically every point in favor of the regulars. Meantime, the controversy was extended beyond the question of university privilege, and touched on the rights of religious in general, the vow of poverty, etc. After the death of Alexander IV, the university obtained a confirmation of its privileges, and the mendicants quietly submitted to take the oath to which they had formerly objected.

The outcome was that the mendicants obtained a secure standing in the university, and the fate of Scholasticism was practically committed to the teachers who belonged to the Dominican and Franciscan orders.¹ In this way, within the Scholastic movement itself, two distinct currents of thought soon began to be defined, — the Dominican tradition and the tradition of the Franciscan schools. The mendicant orders are thus associated with the greatest triumph of philosophy in the thirteenth century, as well as with the tendencies which, in subsequent centuries, led to the downfall of Scholasticism.

CHAPTER XXXVII

PREDÉCESSORS OF ST. THOMAS

Among the predecessors of St. Thomas in the thirteenth century were **Simon of Tournai**, **Alexander Neckam**, **Alfred Sereschel**, **William of Auvergne**, **Alexander of Hales**, **John de la Rochelle**, and **Albert the Great**. **St. Bonaventure**, the contemporary and friend of St. Thomas, and **Roger Bacon**, the adversary of both St. Bonaventure and St. Thomas, are also included in this chapter.

Simon of Tournai, **Alexander Neckam**,² and **Alfred Sereschel**³ (**Alfredus Anglicus**) began, about the end of the twelfth century and the beginning of the thirteenth, to expound the physical and physiological doctrines of Aristotle and the Arabians. They taught and wrote before the introduction of the translations made from the Greek text of Aristotle, and were attacked by the mystics as innovators and teachers of profane doctrine.

¹ In 1252, seven chairs out of twelve were occupied by regulars. Cf. Denifle, *op. cit.*, I, 258, note 12.

² Alexander's principal work, *De Naturis Rerum Libri Duo*, was edited by Thomas Wright (London, 1863), and is No. 34 of the collection *Rerum Britannicarum Medii Ævi Scriptores*.

³ Alfred's work, *De Motu Cordis*, was edited by Barach (Innsbruck, 1878).

WILLIAM OF AUVERGNE

Life. William of Auvergne (called also William of Paris) was born at Aurillac towards the close of the twelfth century. About 1220 he was appointed to teach in the episcopal school at Paris, and in a few years he became one of the most celebrated of the theologians of the university. In 1228 he became bishop of Paris. He died in 1249.

Sources. The principal works of William of Auvergne are a metaphysical treatise *De Universo*, and two psychological treatises, *De Anima* and *De Immortalitate Animæ*.¹ His collected works were published at Nuremberg in 1496, at Venice in 1591, and at Orleans in 1674. Monograph: *Die Erkenntnislehre des Wilhelm von Auvergne*, by Dr. Baumgartner (Münster, 1893).

DOCTRINES

William has for his aim to unite the newly introduced philosophy of Aristotle with the philosophy of St. Augustine and the other Platonists. When, however, he finds that the doctrines of the Arabian Aristotle clash with those of the Christian Platonists, he adopts the traditional Augustinian teaching.

In his *theory of knowledge* he rejects, on the one hand, the Platonic doctrines of preëxistence and of innate ideas, and on the other hand, the Aristotelian doctrine of the active intellect, teaching that, although the soul obtains a knowledge of sensible things from the world of sense phenomena, it is able, nevertheless, to form the *species* of things *in itself and by itself*; that is, without the aid of a power such as the active intellect, distinct from itself. Thus,² he says, "Similiter (anima) non est recipiens tantum sed etiam actrix et effectrix earum (*i.e.*, specierum) apud semetipsam in semetipsa." Roger Bacon, therefore, was wrong when, after having listened to two lectures by William of Auvergne, he ascribed to him the opinion: "Intellectus Agens

¹ This compilation of a work by Dominicus Gundisalvi is published by Dr. Bülow, *Des Dominicus Gundissalinus Schrift von der Unsterblichkeit der Seele* (Münster, 1897), pp. 39 ff.

² *De An.*, Q. V, Art. 6 (Orleans edition, p. 124).

est Deus principaliter et secundario Angeli qui illuminant nos.”¹ In *De Universo* William explicitly declares that the intellect “levissime commotus (a rebus) earum species ipse sibi ipsi semetipso format.”²

Our knowledge of first principles is obtained, William of Auvergne teaches, not from the contingent world, but from God, in whom we perceive them by means of a “special illumination (voluntaria Dei illuxio).”³ In his solution of the problem of universals he seems to incline towards Platonic realism :

Necesse est res intelligibiles ita se habere sicut de eis testificatur intellectus. Testificatur autem eas esse communes, sempiternas, et seorsum a generatione et corruptione et ab omni tumultu mutationum.⁴

The passage is, however, capable of being interpreted in the Aristotelian sense.

Historical Position. William of Auvergne represents the first stage in the transition from the Scholasticism of the twelfth to that of the thirteenth century. It was Alexander of Hales who, by the use of the Scholastic method, constructed the first of the great systems of Aristotelian Scholasticism.

ALEXANDER OF HALES

Life. Alexander of Hales,⁵ *Doctor Irrefragabilis*, was born in Gloucestershire, England. In 1222 he joined the order of St. Francis. In 1231 he was installed as the first Franciscan teacher of theology in the University of Paris. He died in 1245.

Sources. The principal if not the only work of Alexander of Hales is the *Summa Theologiae*, which was completed by his pupils in 1252, and published at Nuremberg in 1482 and at Venice in 1575. Works to be consulted: M. Picavet, *Abélard et Alexandre de Hales* (brochure), De Martigne, *La Scolastique et les traditions Franciscaines* (Paris, 1888).

¹ *Opus Tertium*, Cap. 23.

² P. I, Sect. III, Cap. 3.

³ *De An.*, VII, 6, p. 211.

⁴ *De Universo*, P. II, Sect. III, Cap. 13.

⁵ Alexander derived his surname from Hales, or Haillis, in Gloucestershire.

DOCTRINES

Method. Alexander of Hales was the first schoolman who wrote after the entire works of Aristotle had become known in the schools, and the prohibition that debarred some of his predecessors from the study of Aristotle had been removed. His is not the first *Summa*, Robert of Melun and Stephen Langton having composed *Summæ* in the twelfth century; Alexander's is, however, the first *Summa* made after the introduction of Aristotle's works. In it we find the Scholastic method fully developed. Instead of the array of antithetical opinions found in Abelard's *Sic et Non*, we find the tripartite arrangement of each question, corresponding to the arrangement afterwards made by St. Thomas under the heads *Videtur quod non*, *Sed contra* and *Respondetur ad I^{um}*, etc. Besides giving definite form to the Scholastic method, Alexander outlined the plan which St. Thomas and the other great summists were to follow.

Metaphysics. Human reason can arrive at a knowledge of the existence of God, but not at a knowledge of His essence: we can know *quia est*, but not *quid est*.¹ Alexander admits the validity of St. Anselm's ontological argument,² maintaining that a knowledge of God is natural to man: "Cognitio de Deo in habitu naturaliter nobis impressa est." He distinguishes, however, between *cognitio actualis* and *cognitio potentialis*.

God is *actus purus*. Everything else (all created being), is composed of matter and form. Even spiritual substances are composed of spiritual matter, "quæ nec est subjecta motui nec contrarietati." This universal matter is different from the universal matter which, according to Avicembrol, is the substratum of all finite existence, for Alexander rejects the pantheistic and Neo-Platonic elements of Avicembrol's philosophy.

With regard to universals, Alexander teaches, in the first place, that they exist *ante rem* in the mind of God. The Divine

¹ *Summa*, P. I, Q. II, Memb. 2, Art. 1. ² *Ibid.*, Q. III, Memb. 2.

Mind is, he thinks, the intelligible world of which Plato speaks: "Mundum intelligibilem nuncupavit Plato ipsam rationem sempiternam qua fecit Deus mundum."¹ In the next place, he teaches that the universals are *in re*; this may be inferred from his doctrine that the active intellect abstracts the intelligible species from phantasms.²

Psychology. Alexander's psychology, while it is Peripatetic in its general trend, bears evidence of the influence of the Augustinian idea of the soul and its faculties. In the *Summa*,³ our philosopher examines seven different definitions of the soul, and decides that the soul, although it is the substantial form of the body, is itself composed of a *spiritual matter*—an admission which, as the later schoolmen conclusively show, is incompatible with the substantial unity of man. In his enumeration of the faculties of the soul, he follows the traditional Augustinian division of the powers of the mind into *ratio*, which has for object the external world, *intellectus*, which has for object created spiritual substances, and *intelligentia*, which has for object the *rationes æternæ* and first principles. Our knowledge of the supersensible world by means of *intellect* and *intelligence* is dependent on a special divine illumination.⁴ Our knowledge of the external world is rendered possible by the *active intellect*, which abstracts intelligible species from the *material intellect* (*phantasia*). The *possible intellect*, the receptacle of these species, is the cognitive power of the mind considered as in potency to knowledge.⁵

Historical Position. Alexander's philosophy exhibits, in a less degree than did the philosophy of William of Auvergne, the strife of two elements,—the Augustinian and the Peripatetic. The Irrefragable Doctor made more extensive use of the writings of Aristotle than his predecessor had done; still he did not succeed in substituting the Aristotelian doctrines of metaphysics

¹ *Summa*, P. II, Q. III, Memb. 1, with reference to St. Augustine's *Retractationes*.

² *Cf. op. cit.*, P. II, Q. LXIX, Memb. 2, Art. 3.

³ *Op. cit.*, P. II, Q. LIX ff.

⁴ *Cf. De Wulf, op. cit.*, p. 256.

⁵ *Cf. Summa*, P. II, Q. LXIX.

and psychology for the Augustinian doctrines which had become traditional in the schools. Alexander's most important contribution to philosophy is his development of the Scholastic method and his application of it to the discussion of theological problems. To him is also due the credit of outlining the plan followed in all the great *Summæ*, and, although his synthesis of philosophical doctrine is lacking in unity and completeness, it cannot be denied that his influence on the summists of the next generation was very great. He was held in high esteem by Albert and St. Thomas; as Gerson says, "Testantur scripta ejusdem Sancti Thomæ . . . quam intimum sibi fecerat et familiarem illum quem laudabat doctorem Alexandrum."¹

John de la Rochelle (1200-1245) was a disciple of Alexander, under whom he qualified for his license as teacher at Paris. He wrote a treatise, *De Anima*, in which he defends the Augustinian doctrine of the identity of the soul with its faculties (about which Alexander seems to hesitate), and accentuates the physiological aspect of psychological problems. In the latter point he shows the influence of the Arabian physicists. When, in 1245, he retired from the duties of teacher,² he was succeeded by John of Parma, who, in turn, was succeeded by St. Bonaventure.

ST. BONAVENTURE

Life. St. Bonaventure (John Fidenza), surnamed *Doctor Seraphicus*, was the most illustrious among the disciples of Alexander of Hales. He was born at Bagnorea near Viterbo, in the year 1221. In 1238³ he entered

¹ Bartholomew the Englishman was also one of the Franciscan teachers of this period. His principal work, *De Proprietatibus Rerum*, written about 1260, was translated into English in the fourteenth century. Selections from this remarkable treatise were published in 1893 by Steele, under the title *Medieval Lore*. Consult Jourdain, *Recherches*, pp. 358 ff., and *Chartul.*, I, 644 and 649, note 5.

² Cf. *Chartul.*, I, 187. The work *De Anima* was published at Prati in 1882 by P. Marcellino da Civezza.

³ Cf. Sbaralea in *Bullarium Franciscanum*, III, p. 12, n., and in *Bonaventura Opera Omnia*, Quaracchi edition, Vol. I, Introd., p. iii. The Bollandists (*Acta Sanctorum Julii*, Vol. III, 781) give the year 1243.

the order of St. Francis. He was sent to Paris, where, as he himself tells us,¹ he had for master Alexander of Hales. In 1248 he received his licentiate; and although in 1253 he undertook the duties of teacher of theology in the Franciscan convent, it was not until 1257 that he made his solemn *inceptio*, having for fellow-candidate St. Thomas of Aquin.² The two saints were employed by their respective orders to defend the mendicants against William of St. Amour, and from the moment of their first acquaintance at Paris until their death, which occurred in the same year, 1274, they maintained a friendship in which they seemed to rise above the spirit of rivalry existing even at that time between the two great orders. St. Bonaventure was made general of the Franciscans in 1257, and was raised to the dignity of cardinal by Gregory X. He died during the Council of Lyons (1274).

Sources. St. Bonaventure's works were published in Rome (1586-1596), Mainz (1609), and Lyons (1668). They have been republished by the Franciscans of Quaracchi (near Florence). The last volume of this excellent edition appeared in 1902. The most important of St. Bonaventure's works are his *Commentaria in IV Libros Sententiarum, De Reductione Artium ad Theologiam, Itinerarium Mentis ad Deum, Breviloquium*, and a number of treatises on ascetic theology, such as the *Soliloquium, De Regimine Animæ*, etc. As secondary sources we have *Della vera filosofia, etc., del Serafico Dottor S. Bonaventura* by P. Marcellino da Civezza (Genova, 1874), and *Die Lehre des heil. Bonaventura*, etc., by Krause (Paderborn, 1888).

DOCTRINES

St. Bonaventure's philosophy is, like that of his two predecessors in the Franciscan chair of theology, a combination of Augustinian with Peripatetic elements. Instead, however, of drawing from the psychology of St. Augustine, the Seraphic

¹ *Commentarium in II^{um} Librum Sententiarum*, Dist. XXIII, Art. 2, Q. III.

² Cf. Wadding, *Annales Franciscani*, II, 55. The Bollandists (*Acta Sanctorum*, loc. cit.) doubt this assertion of Wadding's. They maintain that St. Bonaventure was elected general in 1256, and that St. Thomas did not receive his doctorate before 1257. Denifle (*Chartul.*, I, p. 333, note 6) maintains that St. Bonaventure was elected general in 1257, that (*ibid.*, 187, note 5) he was appointed to teach in 1248, and that (*ibid.*, 244, note 5) he may have been *magister regens* in 1253. It is probable that St. Bonaventure was installed as teacher in the convent of his order in 1248, was appointed master in 1253, and made his solemn *inceptio* at a later date.

Doctor draws rather from the *mysticism* of the Christian Plato, at the same time retaining in his account of the relation of form to matter some of the anti-Aristotelian tenets which had even in his day become part of the traditional teaching of the Franciscans. He is careful, like his great contemporary St. Thomas, to distinguish between theology, which has for object supernatural truth, and philosophy, which has for object truth of the natural order. He is inclined, however, to attach more importance than St. Thomas does to the emotional and volitional element in philosophy and to the *affective*, or the ascetico-mystic, aspect of theology. Still, it is possible to set aside for a moment the mystic and emotional elements of his system of thought, so as to enumerate the points of teaching in which he differs from St. Thomas and to treat under separate titles his *mysticism* and his alleged *ontology*.

Metaphysics. All finite being is composed of act and potency. St. Bonaventure, identifying form with act, and matter with potency, teaches the doctrine advocated by Alexander of Hales, — that there is *no form without matter*.¹ This is one of the distinctively Franciscan doctrines. The *plurality of forms* is another. Besides the substantial form, which *completes* the being of a substance, there are subordinate forms, which are principles of ulterior perfection.² With regard to the *principle of individuation*, — that by which the individuals of the same species are differentiated from one another, — St. Bonaventure decides that the individual, *hoc aliquid*, is individualized both by the matter and by the form :

Si tamen quæras a quo veniat (individuat) *principaliter* ; dicendum quod individuum est *hoc aliquid*. Quod sit *hoc*, principalius habet a materia. Quod sit *aliquid*, habet a forma. Individuatio igitur in creaturis consurgit ex duplici principio.³

¹ *In II^{um} Sent.*, Dist. III, P. I, Art. 1.

² *Cf. In II^{um} Sent.*, Dist. XII, Art. 1, Q. III.

³ *In II^{um} Sent.*, Dist. III, P. I, Art. 2, Q. III.

The doctrine of *rationes seminales* is another characteristic doctrine of the Franciscan school. St. Thomas accounts for the production of created substances by postulating the potency of the matter acted upon and the causality, or efficiency, of the agent which acts. Besides these, St. Bonaventure postulates on the part of the matter, principles created with the matter and coöperating with the agent in the production of the effect. Such principles he identifies with the *rationes seminales* of which St. Augustine speaks.¹

Psychology. In his psychology, St. Bonaventure enumerates *memory, intelligence, and will* as faculties of the soul, and distinguishes them from the essence of the soul: "Quoniam egrediuntur ab anima, non sunt omnino idem per essentiam."² His theory of knowledge is best studied in connection with his mystical teachings.

Mysticism. The mystical elements of St. Bonaventure's system of thought are developed in his *Itinerarium Mentis ad Deum* and his *De Reductione Artium ad Theologiam*. He quotes with approval the teachings of St. Bernard and of the Victorines, and in later times he himself became the favorite author of the orthodox mystics. All knowledge, he teaches, takes place by means of *illumination*. Now there are four kinds of illumination:

(1) *lumen exterius, scilicet lumen artis mechanicæ*; (2) *lumen inferius, scilicet lumen cognitionis sensitivæ*; (3) *lumen interius, scilicet lumen cognitionis philosophicæ, et* (4) *lumen superius, scilicet lumen gratiæ et Sacræ Scripturæ*.³

The *lumen interius*, the light of philosophical knowledge, starting from a knowledge of the sensible world, and of first principles, which are natural gifts, enables us to rise to a knowledge of God; but it is only by the *lumen superius*, the light of Divine Grace

¹ Cf. *In I^{um} Sent.*, Dist. VII, P. II, Art. 2, Q. I.

² *In I^{um} Sent.*, Dist. III, P. II, Art. 1, Q. III.

³ *De Reductione Artium ad Theologiam*, No. 1.

and Holy Writ, that we can arrive at a knowledge of *salutary truth*, that is, of the truth which is unto salvation. In the *Breviloquium*,¹ St. Bonaventure adopts the teaching of Hugh of St. Victor, who distinguished the *eye of the flesh*, by which we perceive the external world, the *eye of reason*, by which we attain a knowledge of ourselves, and the *eye of contemplation*, by which we rise to a knowledge of things above us. In the external world we find a trace (*vestigium*) of God; in ourselves, and especially in the threefold activity of the soul (memory, reason, and will), we find an image (*imago*) of God. By means of contemplation of higher things we rise to a knowledge of God in His nature and threefold personality. Or rather, we are lifted up to this ecstatic knowledge; for, while it is possible without the aid of Divine Grace to know God as He is shadowed forth in nature and imaged in our own souls, it is impossible without the aid of Divine Grace to acquire any knowledge which is unto salvation, or to rise from the contemplation of higher things to a knowledge of the divine nature and the divine personalities.²

Ad contemplationem nemo venit nisi per meditationem perspicuam, conversationem sanctam et orationem devotam.³

Quam illuminationem nemo novit nisi qui probat, nemo autem probat nisi per gratiam divinitus datam.⁴

In the highest grade of contemplative knowledge the soul is united with God in mental and mystic ecstasy (*excessus mentalis et mysticus*), which is described in the last chapter of the *Itinerarium* as a state in which the soul leaves all sense and intellect, and is lost, as it were, in God:

Si autem quæras quomodo hæc fiant, interroga gratiam, non doctrinam; desiderium, non intellectum; gemitum orationis, non studium lectionis; sponsum, non magistrum; Deum, non hominem; caliginem, non claritatem; non lucem, sed ignem inflammantem et in Deum . . . transferentem."⁵

¹ II, Cap. 12.

⁴ *Breviloquium*, p. vi, Cap. 6.

² *Itinerarium Mentis ad Deum*, Capp. 2, 3.

⁵ *Itin.*, Cap. 7.

³ *Ibid.*, Cap. 1.

Is St. Bonaventure an Ontologist? Ontologism maintains (1) that God, the first in order of being, is the first in order of knowledge (*primum ontologicum est primum logicum*); (2) that, consequently, our knowledge of God is intuitive, not abstractive; (3) that in the light of the idea of God all our other ideas are acquired. Now, on the one hand, St. Bonaventure teaches that we rise from a knowledge of creatures to a knowledge of God: "Deus, qui est artifex et causa creaturæ, per ipsam cognoscitur."¹ "Cognoscere autem Deum per creaturas . . . hoc est proprie viatorum."² Thus, it is evident that St. Bonaventure does not maintain the priority of our knowledge of God with reference to our knowledge of created things, nor does he maintain that our knowledge of God is intuitive. Moreover, his theory of cognition does not agree with the doctrine that we see all things in God; for, while he maintains that some *species intelligibiles* are infused, he maintains at the same time that other species are acquired by the abstractive power of the active intellect, and that the mind was at the beginning, a *tabula rasa*. "Hæc autem sensibilia exteriora sunt quæ primo ingrediuntur in animam per portas quinque sensuum."³ On the other hand, many of the teachings of St. Bonaventure are capable of an Ontologistic interpretation. He teaches, for example, that our knowledge of God and of the soul is independent of all sense-knowledge: "Necessario enim oportet ponere quod anima novit Deum et seipsam et quæ sunt in seipsa sine adminiculo sensuum exteriorum."⁴ He also teaches that the first object of our knowledge is God: "Esse igitur quod primo cadit in intellectu et illud esse est quod est actus purus: restat igitur, quod illud esse est esse divinum."⁵ The context, however, shows that these two passages do not prove St. Bonaventure to be an Ontologist. He himself explains that the doctrine contained in the first passage agrees with the

¹ *In I^{um} Sent.*, Dist. III, P. I, Q. II.

² *Ibid.*, Q. III.

³ *Itin.*, Cap. 2, No. 4.

⁴ *In II^{um} Sent.*, Dist. XXIX, Art. 1, Q. II.

⁵ *Itin.*, Cap. 5.

Aristotelian principle, "Nihil est in intellectu quod prius non fuerit in sensu," and he gives the key to the second passage when he explains¹ the difference between the *intellectus apprehendens*, which may understand the effect without understanding the cause, and the *intellectus resolvens*, which, if it fully "resolves" the effect, must include in a knowledge of the effect a knowledge of the cause, and in the knowledge of any creature the knowledge of God. Besides, when, in a treatise which is professedly mystic, the Seraphic Doctor speaks of God as the first object of knowledge, he may be understood to mean that a knowledge of God is the beginning of that *knowledge which is unto salvation*.

Historical Position. St. Bonaventure is the type of the orthodox mystic. He reproduces the principles of the Victorine school without any of the exaggerations which characterized the later representatives of that school. He does not oppose the study of philosophy or the use of dialectic. To the *Amo ut intelligam* of the mystics he adds the *Intelligo ut credam* and the *Credo ut intelligam* of the dialecticians. He became, as has been said, the favorite author of the mystics of later times. Gerson, for instance, writes :

Si quærat a me quis inter cæteros doctores plus videatur idoneus, respondeo sine præjudicio quod Dominus Bonaventura, quoniam in docendo solidus est, et securus, pius, justus, et devotus.²

ROGER BACON

Life. Roger Bacon, *Doctor Mirabilis*, although belonging to the Franciscan order, is not a representative of Franciscan tradition. Still, he reproduces some of the Franciscan doctrines, and for this reason he may be associated with Alexander of Hales and St. Bonaventure. He was born near Ilchester in Gloucestershire, in the year 1214. He studied at Oxford, where he had for masters Edmund Rich, Robert Greathead, and Richard

¹ *In I^{um} Sent.*, Dist. XXVIII.

² *Opera Omnia*, Vol. I, p. 21.

Fitzacre (or Fishacre), from whom he imbibed a love for linguistic, mathematical, and physical sciences. About the year 1245 he repaired to Paris, *more suæ gentis*, as Brucker says, there to complete his studies. He listened, not very respectfully, as his writings show, to Alexander of Hales and, possibly, to Albert the Great. Returning to Oxford, he joined the Franciscan order and became one of the most famous masters at that university. His career, however, was as brief as it was brilliant. He was exiled by the authority of his superiors — for what reason we are not told — and lived from 1257 to 1267 in what was virtually a prison belonging to his order in Paris. In 1267 he was liberated by order of Clement IV, and returned to Oxford. In 1278 he was again imprisoned on the charge of insubordination and on account of his violent attacks on the religious orders and the higher clergy. He was liberated in 1292; but so little notice did the master once so famous now attract that not even the date of his death is recorded.¹

Sources. Bacon's principal works are *Opus Majus*, *Opus Minus* (an epitome of the *Opus Majus*), and *Opus Tertium*. Besides these he left a *Compendium Philosophiæ*. The *Opus Majus* was published by Jebb in 1733, and by Bridges (Oxford), 1897. In 1859 Brewer published the remaining works of Bacon (London, 1859).² An excellent study of the life of Bacon is found in the work of M. Charles, *Roger Bacon* (Paris, 1861). Consult also article by Narbey in *Revue des questions historiques* (January, 1894) and Potthast, *Wegweiser*, p. 130.

DOCTRINES

Reform of Scientific Method. Roger Bacon is rightly regarded as the precursor of his namesake, Francis Bacon; for he was the first to attempt to reform science by advocating the use of observation and experiment. He advocated also the study of mathematics and of languages. But although his efforts were supported by papal authority as long as Clement IV lived,

¹ Hauréau, *op. cit.*, III, 82; according to the *Kirchenlexikon* (Wetzer u. Welte), Roger died in 1294 and was buried at Oxford.

² The volume contains the *Opus Tertium*, *Opus Minus*, and *Compendium Philosophiæ*. It is No. 15 of the collection *Rerum Brit. Mediæ Ævi Scriptores*. On Roger Bacon's works, cf. Whewell, *Philosophy of the Inductive Sciences*, XII, chap. vii.

Bacon never attained even a momentary success. The age was not yet tired of metaphysical speculation, and, besides, the intemperate zeal which Roger Bacon expended on the cause of scientific reform was of itself sufficient to bring about the failure of his efforts. He rightly insisted on the use of observation in the investigation of nature; he was, however, not only wrong, but imprudent when, without distinguishing between science and science, he condemned all use of deductive reasoning, even going so far as to say that mathematical proof does not convince unless it is confirmed by experience: "Sine experientia nihil sufficienter sciri potest."¹ Moreover, Roger was somewhat boastful; in his *Opus Majus*, addressed to Clement IV, he said that he had invented a system of universal grammar by means of which any one might learn Hebrew, Greek, Latin, and Arabic within a few days (*infra paucissimas dies*).² So enthusiastic was he for the study of language that in the same work he advanced the extraordinary opinion that all Christians should read the Scriptures in the original Hebrew and Greek. These exaggerations had their natural effect. Bacon was regarded as a fanatic; he not only failed to influence the thought of his age, but even placed in the way of scientific reform obstacles which were not removed until the end of the Scholastic era.

Philosophy. When Roger Bacon declared that he would burn all the books of Aristotle if he possessed them, he is to be understood as speaking of the translations of Aristotle, which he justly condemned as inaccurate. He held Aristotle, in the greatest reverence, and next to Aristotle he esteemed Avicenna; indeed, he drew much of his philosophical and scientific doctrine from Arabian sources. He agreed with his Franciscan predecessors as to the plurality of forms and the existence of *rationes*

¹ *Opus Majus* (ed. 1733), p. 445.

² In the *Opus Tertium* (ed. Brewer, p. 65) Roger is more specific: "Infra tres dies, ego quemcumque diligentem et confidentem docerem Hebræum." A fragment of Roger's *Greek Grammar* has just been published by the Cambridge University Press (1902), edited by Nolan and Hirsch.

seminales in matter. In his account of the active intellect, however, he goes over to the camp of the Arabian transcendentalists, and not only maintains that the *active intellect is separate*, but explicitly identifies it with God, — a doctrine which, as we have seen, he falsely attributed to William of Auvergne.

Et sic Intellectus Agens secundum majores philosophos non est pars animæ sed est substantia intellectiva alia et separata per essentiam ab intellectu possibili.¹

Still, Roger was convinced that in maintaining this doctrine he was not departing from the doctrine of the schools; he believed that he was merely interpreting St. Augustine's teaching concerning the *rationes æternæ*.²

The Arabian doctrine that human life and human action depend on the heavenly bodies, — a doctrine which formed the theoretical basis of magic during the Middle Ages, — is part of the philosophy of Bacon :

Per cœlum enim alteratur corpus, et alterato corpore, excitatur anima nunc ad actus privatos, nunc publicos, salva tamen in omnibus arbitrii libertate.³

Scientific Doctrines. These belong to the history of the physical sciences rather than to the history of philosophy.⁴ Bacon seems to have had some knowledge of the reflection and refraction of light, and in more than one passage of his *Opus Majus* he implies that he was acquainted with the use of the telescope: "Possumus sic figurare perspicua (ut) faceremus solem et lunam et stellas descendere secundum apparentiam hic inferius."⁵ Figuiet⁶ thinks it probable that our philosopher used a combination of a concave mirror and a lens, and that by means of this

¹ *Opus Majus*, p. 26; cf. *Opus Tertium*, p. 74.

² Cf. *Opus Majus*, *loc. cit.*; also *Opus Tertium* (ed. Brewer), p. 74.

³ *Opus Majus*, p. 117; cf. *Opera* (ed. Brewer), p. 560.

⁴ Cf. Berthelot, *La chimie au Moyen Age* (Paris, 1893); Meyer, *History of Chemistry*, trans. by McGowan (London, 1898).

⁵ *Opus Majus*, p. 357; cf. *Opera*, ed. Brewer, p. 534.

⁶ Cf. Figuiet, *Vies des savants du Moyen Age* (Paris, 1883), p. 202.

combination he observed the heavenly bodies. In a work entitled *De Secretis Operibus Artis et Naturæ*, which is ascribed to Bacon by Figuier and others,¹ we find interesting anticipations of modern inventions, such as locomotives (*currus etiam possunt fieri ut sine animali moveantur cum impetu inæstimabili*), flying machines (*instrumenta volandi*), and suspension bridges (*sine columna vel aliquo sustentaculo*). In the *Opus Majus* (p. 318) the Milky Way is described as composed of many stars, "habens multas stellas congregatas."²

Historical Position. Roger Bacon resembled Abelard in his complete lack of respect for authority and scientific prestige. He spoke disparagingly of the Irrefragable Doctor (Alexander of Hales), saying that his *Summa* was "plus quam pondus unius equi"; he characterized the great Albert as ignorant and presumptuous, and expressed contempt for the linguistic attainments of St. Thomas. He attacked the mendicant orders, the bishops, and the papal court. In this way he brought discredit on the cause which he was otherwise so well fitted to defend. He was certainly the greatest scientific light of the thirteenth century. Had he possessed as much prudence as scientific insight, he would probably have succeeded in his reforms and conferred inestimable benefit on Scholastic philosophy. Albert, who was less of an innovator than Bacon, contributed far more than Bacon did to the advancement of science in the thirteenth century.

ALBERT THE GREAT

Life. Blessed Albert the Great, *Doctor Universalis*, represents the beginning of the Dominican tradition in philosophy. He was of the noble family of Bollstädt, and was born at Lauingen in Suabia in 1193. About the year 1212 he went to Padua, where for ten years he devoted himself to the study of the liberal arts, including philosophy. In 1223 he entered the order of St. Dominic. After completing his theological studies at Bologna,

¹ Cf. Appendix I to Brewer's ed., especially pp. 534 ff.

² Cf. Figuier, *op. cit.*, pp. 209 ff.

he taught first at Cologne and other German cities, and later at Paris, where he seems to have eclipsed all his contemporaries. He taught at the convent of St. James, from which, after three years (1245-1248), he was transferred to Cologne, and it was to Cologne that he returned once more when, after three years (1260-1262) spent in Ratisbon as bishop of that see, he resigned the mitre to devote himself exclusively to study. He died in 1280, leaving a reputation for extraordinary learning and almost superhuman knowledge of the secrets of natural science. "Vir in omni scientia adeo divinus," says a contemporary, "ut nostri temporis stupor et miraculum congrue vocari possit."

Sources. Albert's works, comprising twenty-one folio volumes in the Lyons edition of 1651 (reprinted, Paris, 1890 ff.), contain: (1) commentaries on Aristotle's logical, physical, metaphysical, and ethical treatises; in these the text and the exposition of the text are not separated, as they are in St. Thomas' commentaries; (2) philosophical works — *De Causis et Processu Universitatis* and *De Unitate Intellectus contra Averroësem*; (3) theological works — commentaries on Scripture, commentaries on the *Sentences*, *Summa de Creaturis*, *Summa Theologica*, and ascetic treatises, such as the *Paradisus Animæ*. Monograph: Sighart's *Albert der Grosse*, trans. in abridged form by Dixon (London, 1876).

DOCTRINES

The philosophy of Albert the Great is mainly identical in spirit and content with that of his illustrious disciple, St. Thomas. There are, however, some points of difference; as, for example, in the doctrine of the existence of *rationes seminales* and the permanence of the forms of elements in a mixture, both of which are maintained by Albert but rejected by St. Thomas. It may be said, without detracting from the credit due to Albert as one of the greatest exponents of Scholasticism in its final form, that it was his pupil who first imparted to Scholasticism its most compact systematic development.

Logic is divided into two parts, the study of *incomplexa*, or uncombined elements of thought, and the study of *complexa*, that is, of judgment and inference.¹ In the second tract of the book,

¹ *De Prædicabilibus*, Tract. I, Cap. 5.

De Prædicabilibus, Albert takes up the study of the problem of universals and answers each of Porphyry's questions according to the principles of moderate realism, which, since the beginning of the thirteenth century, had become the common doctrine of the schools.

Metaphysics, or *philosophia prima*, treats of Being and its most universal properties. Under this head is included also the problem of the existence of God. The proof on which Albert places greatest reliance is not the ontological, but the cosmological argument.¹

Cosmology. Albert teaches that God created the world *ex nihilo*, according to exemplars (*species et rationes omnium creatorum*) existing eternally in the Divine Mind.² The world is not the best possible world.³

Psychology. The soul is an immaterial principle, the form of the body: "Ex anima et corpore fit unum naturaliter et substantialiter."⁴ The intellect is a faculty of the soul, independent indeed of the body (*non affixa organo*), yet receiving from the organism the material of thought. It is not the intellect that is fatigued, but the organism (*motus phantasmatum et discursus spiritus*) which ministers to it.⁵ Albert composed a treatise in refutation of the Arabian doctrine that the intellect is one for all men.

Scientific Doctrines. It was as a student of nature that Albert showed the universality of his genius. He was an authority, in his day, on physics, geography, astronomy, mineralogy, botany, alchemy, zoölogy, physiology, and phrenology. His contributions to natural science are quite as important as his contributions to philosophy. Indeed, his chief merit as a philosopher lies in the fact that he did more than any of his predecessors to establish in philosophy the spirit of scientific investigation. It

¹ Cf. *Sum. Theol.*, P. I, Tract. 3, Q. XVIII, Memb. 1.

² *Op. cit.*, P. I, Tract. 13, Q. LV.

³ *Ibid.*, Tract. 19, Q. LXXVII, Memb. 3.

⁴ *Sum. Theol.*, P. II, Tract. 12, Q. LXVIII.

⁵ *Summa de Creaturis*, P. II, Tract. 1, Q. LIX.

is true that he borrowed many of his scientific doctrines from Aristotle ; nevertheless, he did not hesitate to criticise Aristotle and to reprove those who regarded Aristotle as infallible : " Si autem credit ipsum (Aristotelem) esse hominem, tunc procul dubio errare potuit sicut et nos." ¹ He borrowed also from the Arabian and Jewish commentators of Aristotle, but he hints that personal observation led him to hold various physical doctrines which he did not feel justified in mentioning in his commentaries :

Physica enim tantum suscepimus dicenda plus secundum peripateticorum sententiam prosequentes ea quae intendimus quam ex nostra scientia.²

" Dicta peripateticorum, prout melius potui, exposui," he says at the end of his book, *De Animalibus*, " nec aliquis in eo potest comprehendere quid ego ipse sentiam in philosophia naturali."

Albert's original contributions to natural science cannot be mentioned here except in a general way. He was the first to use the term *affinity* to designate the cause of the combination of elements. He rejected the current theory that baser metals may be changed into gold by means of the philosopher's stone.³ Still, he maintained the possibility of transmuting one metal into another ; for all metals are naturally produced by the earth from a combination of sulphur and mercury (*argentum vivum*) ; they differ, therefore, by an accidental, not by a substantial form.⁴ Albert's observations and experiments in botany, zoölogy, and physical geography are mentioned in terms of the highest praise by Humboldt.⁵

Historical Position. Albert is, without doubt, the greatest of the Christian expounders of Aristotle who appeared before the time of St. Thomas. We have seen that he is not a slavish follower of Aristotle ; he takes cognizance of the work done by

¹ *In Libros de Physico Auditu*, Tract. 1, Cap. 14 ; *Opera*, Vol. II, p. 332.

² *De Somno et Vigilia*, Tract. 1, Cap. 12.

³ *De Mineralibus*, Lib. II, Tract. 1.

⁴ *Libellus de Alchimia*, p. 2.

⁵ *Cosmos*, Vol. II, Cap. 6. Cf. also *Revue Thomiste*, March and May, 1893.

the Jews and Arabians, he acknowledges the debt that Christian philosophy owes to Plato and the Platonists, and in the region of physical science he advances by the exercise of personal observation beyond the doctrine of Platonists and Peripatetics. Great, however, as was Albert's erudition, — for he seems to have been exceptionally well read in the literature of physical science, — his knowledge of the succession of systems of thought was singularly inaccurate: he speaks, for example, of Plato as deriving certain doctrines from the Epicureans.¹

Albert's chief merit lies in the success with which he expounded Aristotle's physical doctrines, and in the impulse which his own researches in physical science gave to the investigation of nature. He was lacking in the power of synthesizing the scattered elements of knowledge into a compact system of thought. In this respect he was excelled by his illustrious pupil, St. Thomas, whose future glory he foretold, and whose renown as a teacher outshone his own, throwing greater luster on the Church and on the order of St. Dominic, to which both Albert and St. Thomas belonged.

CHAPTER XXXVIII

ST. THOMAS OF AQUIN²

Life. St. Thomas, surnamed the *Angelic Doctor*, belonged to the noble family of Aquino, which was related to the imperial family and to the royal houses of Aragon, Sicily, and France. His father was count of

¹ Cf. *De Decem Pradicamentis*, Tract. II, Cap. 4.

² **Authorities.** In the *Acta Sanctorum Martii* (Vol. I, pp. 653-746) are to be found the sources from which the biographers of St. Thomas draw the materials for the study of his life: the *Acts* of the process of canonization, the *Life* by Tocco, accounts of the translations of his remains, etc. Potthast (*Wegweiser durch die Geschichtswerke des Europäischen Mittelalters*, p. 1601) gives a complete list of sources. Cf. Vaughan, *Life and Labors of S. Thomas of Aquin* (2 vols., London, 1872).

Aquino, Belcastro, and Roccasecca. In the fortress at Roccasecca our saint was born in the year 1224 or 1225.¹ When five years old he was sent to the monastery of Monte Cassino, where his uncle Sinnebald ruled as abbot. There, in the midst of the struggles between the papacy and the empire, — struggles in which the abbot, as feudal lord of a large province, was obliged to take sides, — the monks continued to teach and to cultivate learning, and there, according to tradition, the young Thomas began to occupy his mind with the question, *Quid est Deus?* He studied grammar, poetry, rhetoric, logic, and, perhaps, the elements of philosophy. In 1236 Sinnebald died, and shortly after that event the community of Monte Cassino was broken up for a time, and St. Thomas returned to his father's castle. After a brief sojourn at home St. Thomas was sent to the University of Naples. The change from Monte Cassino to the university was an important crisis in the life of our saint. The university was at that time dominated by the influence of Frederick II, an influence which was hostile to religion, or at least to the papacy and to the mendicant orders. The city, if we are to believe contemporary chroniclers, was a veritable hotbed of irreligion and licentiousness. St. Thomas, uninfluenced by these surroundings, continued to devote himself to his studies, having for masters Martinus in grammar and Petrus Hibernus in natural science: "In quorum scholis," says Tocco, "tam luculenti cœpit esse ingenii et perspicacis intelligentiæ ut altius et profundius et clarius aliis audita repeteret quam a suis doctoribus audivisset."

In 1243 Thomas entered the order of St. Dominic. His mother, Theodora, having looked forward to another career for her son, threw every obstacle in the way of his entering the Order of Preachers. She carried her opposition so far as to imprison him in the fortress of San Giovanni. Toward the end of the second year of his imprisonment Thomas made his escape, and, the opposition on the part of his relatives having ceased, he was allowed to proceed to Paris in the company of John of Germany. He does not seem to have tarried at Paris for any length of time, but to have gone at once to Cologne, where Albert was teaching. This was in 1244 or 1245. Albert perceived at once the extraordinary talents of his pupil, and when Thomas' fellow-students, failing to detect the intellectual greatness hidden under an extreme modesty of manner, surnamed him the "Dumb Ox," Albert foretold the future renown of his pupil: "Nos vocamus istum bovem mutum, sed ipse adhuc talem dabit in doctrina mugitum quod in toto mundo sonabit."² Tocco³ describes the student Thomas as

¹ The latter is, everything considered, the most probable date. Cf. *Acta Sanctorum Martii*, Vol. I, p. 656.

² Tocco, *Vita*, Cap. 3.

³ *Ibid.*

follows: "Cœpit miro modo taciturnus esse in silentio, in studio assiduus, in oratione devotus, interius colligens in memoria quod postmodum effunderet in doctrina."

Soon after his arrival at Cologne, Thomas was sent to Paris in company with Albert. There they remained until 1248. When, in 1248, Albert was recalled to Cologne, it was decided that his illustrious pupil should once more accompany him, and continue to study under his direction. In 1251 or 1252, by order of the General of the Dominicans, Thomas repaired to Paris, where he undertook the task of expounding the *Books of Sentences*. In 1256 (this is the most probable date)¹ St. Thomas received the degree of master, and was placed at the head of the school at St. James as *regens primarius*. It is probable, however, that, on account of the conflict between the mendicants and the seculars, the solemn *inceptio* did not take place until 1257. Mention has already been made of the part which St. Bonaventure and St. Thomas took in the controversy arising out of this dispute and in the efforts of the mendicants to secure a favorable decision from Rome.

While fulfilling his task as bachelor, or assistant professor, St. Thomas composed his *Commentaries on the Books of Sentences*. After his promotion to the duties of master of sacred science he continued to teach and write, taking up special points treated in elementary fashion by the bachelor who taught under his direction, and devoting himself to the thorough discussion of each doctrine in all its bearings. His fame as a teacher rapidly spread throughout Europe and, in obedience to the commands of his superiors, he taught successively at Rome, Bologna, Viterbo, Perugia, and Naples. In his lectures as well as in his writings, St. Thomas was actuated by a twofold purpose: he strove, first, to defend the truth against the attacks of its enemies, and, secondly, to build up a system of theology and philosophy. The *Summa contra Gentiles* and the *Summa Theologica* are proof of his ability both as an apologist and as a constructive thinker. The former work, begun at Paris about the year 1257 and completed sometime between the years 1261 and 1264, was undertaken at the request of St. Raymund of Pennafort for the purpose of defending Catholic truth against the Arabian pantheists and their followers. The latter work was begun at Bologna about the year 1271. It is St. Thomas' greatest work, his last and most important contribution to Christian theology and

¹ 1253 is the date given by the Bollandists, *op. cit.*, p. 656. Denifle (*Chartul.*, I, 307, n.) gives the following dates: 1248, St. Thomas was sent to Cologne; 1251-1252, he explained the *Books of Sentences* at Paris; 1256, he was made master in theology.

philosophy. For, though the work is entitled *Summa Theologica*, and is, in fact, a summary of Catholic theology, it is also a summary of philosophy. It begins with the question of the existence of God, treats of the attributes of God, traces the process of things from God, and the return of man to God through Christ by means of the sacraments which Christ instituted. It treats, therefore, of the creation and government of the universe, of the origin and nature of man, of human destiny, of virtues, vices, and laws—of all the great problems of speculative and practical philosophy. It is the key to the thought of St. Thomas: it contains the views of his more mature years, and whenever discrepancies occur between the doctrines of the *Summa* and the views expressed in his earlier works, the *Summa* is always to be taken as the embodiment of the "mind" of St. Thomas.

During his career as professor, St. Thomas composed also the *Quæstiones Disputatæ* and the *Quodlibeta*. When a problem, arising out of the interpretation of Aristotle or of the Lombard, was so complicated that its discussion would occupy too much space in the Scholastic commentary, or was so difficult as to puzzle the bachelor, whose duty it was to expound the text of Aristotle or of the Lombard, it was made the subject of a special treatise by the master, and such treatises were called *Quæstiones Disputatæ*. The *Quodlibeta* were answers to questions put to the master by pupils or by outsiders. When, therefore, we find the following among the questions answered by St. Thomas: Did St. Peter sin mortally when he denied Christ? Does a crusader who is returning from the Holy Land die a better death than one who is going thither? Do the damned rejoice at the sufferings of their enemies?¹ we should admire the gentle forbearance with which he strove to remove the difficulties that lay in the way of minds less gifted than his.

After the completion of the first and second parts of the *Summa Theologica*, St. Thomas took up his abode at the convent of his order in Naples and there devoted himself to the completion of the third part. At the end of a year and a half, having reached the ninetieth question, he felt that he could proceed no farther with the work, and when his faithful friend Reginald urged him to continue, he answered in all simplicity, "Non possum." In obedience, however, to the command of Gregory X, he set out for Lyons at the beginning of the year 1274 in order to attend the council that was being held in that city. He fell sick on the way, and when the Cistercian monks of Fossa Nuova, near Maienza, invited him to their cloister, he accepted their invitation. There he spent the last days of his life among the sons of St. Benedict, whose brethren at Monte Cassino had watched

¹ Cf. *Quodlibeta*, IX, 5; VIII, 16; III, 24.

over his early education, and there, on March 7, he died while expounding the Canticle of Canticles.

Character. Contemporary biographers and the witnesses whose depositions are to be found in the *Acts* of canonization bear testimony to the exalted sanctity of the Angelic Doctor; the *Pange lingua*, the *Lauda Sion*, and the prayers which he composed for the office of the Blessed Sacrament testify to his great piety. Every page of his philosophical and theological works reveals the author's single-minded devotion to truth, his courtesy towards his opponents, and his extraordinary grasp of the great principles of Scholastic philosophy and theology. Tocco describes him as "magnus in corpore et rectæ staturæ quæ rectitudini animæ respondet . . . animum nulla sensualis passio perturbabat, nullius rei premebat affectio temporalis, nec ullius honoris inflabat ambitio . . . miro modo contemplativus et cœlestibus deditus."¹

Sources. The principal editions of the works of St. Thomas are the following: the Roman edition of 1570 (known as the edition of Pius V), the Venetian edition of 1592, the Paris edition of 1660, the Parma edition of 1852, and the Leonine edition begun by the Dominicans at Rome in 1882 by order of Leo XIII. The works of St. Thomas may be grouped as follows: (1) commentaries on the works of Aristotle; (2) commentaries on the *Books of Sentences*; (3) exegetical works, *i.e.*, commentaries on the Scriptures, and collections of the opinions of Patristic exponents of the text (*Catena Aurea*); (4) commentaries on the Pseudo-Dionysian treatise *De Divinis Nominibus*, and on the Boethian treatises *De Hebdomadibus* and *De Trinitate*; (5) *Summa contra Gentiles*, *Summa Theologica*, *Quæstiones Disputatæ*, *Opuscula*, and *Quodlibeta*.

On the question of the genuineness of the works ascribed to St. Thomas, *cf.* the *Dissertatio Critica* by De Rubeis, which is prefixed to the Leonine and other editions.

PHILOSOPHY OF ST. THOMAS

In treating of the philosophical system of St. Thomas it will be found convenient to consider: (1) St. Thomas' notion of science, doctrine of the interrelation of sciences, doctrine of universals, theory of knowledge; (2) logic; (3) anthropology; (4) cosmology; (5) metaphysics, including natural theology; and (6) moral and political doctrines.

¹ *Vita*, Cap. 7. Cf. Muratori, *Rerum Italicarum Scriptores*, XI, 1153.

1. **Notion of Science, etc.** (a) *Science* is the knowledge of things through their causes. Scientific knowledge differs from knowledge in general in this, that it gives the cause, or wherefore, of a phenomenon or event. It is, therefore, defined as a knowledge of principles;¹ for, when we define science as a knowledge through causes, we mean primarily those intrinsic causes, or principles, which constitute the unalterable natures of things and underlie their external, shifting, sense-perceived qualities. And, since it is on the unalterable natures of things that laws are based, science may be defined as the knowledge of laws: it is concerned with what is changeable and contingent in so far as the changeable and contingent contains the necessary and universal, which is the true object of scientific knowledge.²

(b) *Faith and Reason.* Intimately associated with the notion of science is the notion of *truth*. Truth is defined as "adæquatio rei et intellectus."³ Now God is the source of all truth. He communicates it to us directly by revelation and indirectly by giving us the power by which we acquire it. Science acquired in the former manner would be *divine*, while the science which we ourselves derive from experience and reason is *human*. Theology is partly divine and partly human. It is divine in its origin, for it starts with revealed truths as principles; and it is human in the course of its development, for it proceeds from premise to conclusion by the aid of reason. The distinction between divine science and human science is not a distinction of material objects, that is, of the truths with which each is concerned, but rather a distinction of formal objects, that is, of the point of view from which the same truths are studied in each science. The difference between theology and philosophy does not consist in the fact that theology treats of God, for philosophy also treats of God and divine truths; the distinction consists rather in this, that theology views truth in the light of divine

¹ *Sum. Theol.*, IIa IIæ, I, 5, c.

² *Op. cit.*, Ia, LXXXIV, 1, c.

³ *Op. cit.*, Ia, XXI, 2, c.

revelation, while philosophy views truth in the light of human reason. This is the first and broadest distinction between theology and philosophy.¹

There are truths which belong exclusively to theology, there are truths which belong properly to philosophy, and there are truths which are common to both sciences. The truths which belong exclusively to theology are the mysteries of faith, such as the Incarnation and the Trinity, which the human mind can neither demonstrate nor comprehend. These we know on the authority of God, Who revealed them. The truths which belong exclusively to philosophy are natural truths of the lower order; that is, truths which have no bearing on man's destiny or on his relations with God. The truths which belong to both sciences are natural truths of the higher order, such as the existence of God. These, on account of the important relation which they bear to supernatural truth, are called the *præambula fidei*. They come within the scope and power of natural reason, and are, therefore, natural; nevertheless, they are proposed for our belief, for, though a knowledge of them is *possible* to all men, it is in point of fact attained only by a few (*a paucis, et per longum tempus et cum admixtione multorum errorum*). Considering, on the one hand, the vital importance of these truths, and, on the other hand, the difficulty of attaining a knowledge of them, it seems natural and fitting that God in His goodness should propose them for our belief.² Now, whether we consider the truths which belong exclusively to theology, or those which are common to theology and philosophy, we realize that the science which studies both classes of truths in the light of revelation, and the science which studies the latter class of truths in the light of reason, are distinct sciences.

But while it is certain that theology and philosophy are distinct, it is no less certain that they are in complete harmony one with the other. "Ea quæ ex revelatione divina per fidem

¹ *Op. cit.*, Ia, I, 1, ad 2^{um}. ² *C. G.*, I, 3, 4; cf. González, *op. cit.*, II, 228.

tenentur non possunt naturali cognitioni esse contraria." ¹ This principle, which may be said to be implied in every system of Christian speculation, is explicitly proved ² by the following consideration : God is the author of all knowledge, natural as well as revealed. It is, therefore, He who teaches us, not only when, by means of the revelation which He has vouchsafed to grant us, we attain the knowledge of truth in the supernatural order, but also when, by the natural powers, which also are His gift, we discover truth in the natural order. Now it is impossible that God should contradict Himself ; it is, therefore, impossible that there should exist a contradiction between natural truth and truth of the supernatural order.

But this is not all. Not only does faith not contradict reason; it strengthens and supplements reason. Faith introduces us into a new world of truth, into a world where everything is novel and strange, but where, nevertheless, an Intelligent Ruler reigns ; where, consequently, we find that everything obeys the inexorable laws of thought which rule the natural world ; for a mystery is not a contradiction. Thus is the horizon of knowable truth enlarged by revelation, and faith becomes the complement of reason. St. Thomas was fully convinced of the limitations of human thought. He did not, it is true, draw the limits of thought so closely as Mansel and Spencer have done. He possessed more confidence than they in the power of the human mind to attain truth. Still, he recognized the principle that the human mind, however high it may soar, must sometime or other reach a level beyond which it cannot rise, and at which all natural knowledge ends. He differed, however, from the agnostic (and the difference is radical) in this, — that while beyond the region of knowledge the modern philosopher places the region of nescience, St. Thomas taught that where science ends faith begins, and that faith is a kind of knowledge. Faith is the assent to truth on account of the authority of God :

¹ *C. G.*, I, 7.

² *Loc. cit.*

Assentit autem intellectus alicui dupliciter, uno modo quia ad hoc movetur ab ipso objecto quod est per seipsum cognitum, sicut patet in primis principiis, quorum est *intellectus*, vel per aliud cognitum, sicut patet in conclusionibus, quarum est *scientia*. Alio modo intellectus assentit alicui, non quia sufficienter movetur ab objecto proprio sed per quamdam electionem voluntarie declinans in unam partem . . . et si quidem hoc sit cum dubitatione et formidine alterius partis, erit *opinio*, si autem sit cum certitudine, absque tali formidine, erit *fides*.¹

Faith, therefore, in so far as it depends on the will is meritorious, while in so far as it is a firm assent and excludes doubt it adds to our knowledge. Knowledge, coextensive with reality, is divided into the realm of science and the realm of faith, and these realms are continuous. Moreover, all faith is radically reasonable; for belief rests on the authority of God, and reason tells us that God can neither deceive nor be deceived:

Dicendum quod ea quæ subsunt fidei dupliciter considerari possunt: uno modo, *in speciali*, et sic non possunt esse simul visa et credita; alio modo *in generali*, scilicet sub communi ratione credibilis, et sic sunt visa ab eo qui credit. Non enim crederet nisi videret ea esse credenda.²

From the foregoing principles it follows that *science can aid faith* (1) by furnishing the motives of credibility and by establishing the preambles of faith; (2) by supplying analogies which enable us to represent to ourselves truths of the supernatural order; (3) by solving the objections which the opponents of faith urge against supernatural truth. St. Thomas subscribed to the twofold principle of Scholasticism: *Credo ut intelligam; intelligo ut credam*.

St. Thomas' doctrine concerning the relations between revelation and reason may be summed up in the propositions: (1) *the domain of faith is distinct from the domain of reason*; (2) *the former is a continuation of the latter*. Here we find expressed the thought which agitated the minds of the schoolmen during the first two periods of Scholasticism — the thought, namely,

¹ *Sum. Theol.*, II^a II^æ, I, 4, c; cf. *Quæstio Disputata De Veritate*, XIV, 1, c.

² *Sum. Theol.*, II^a II^æ, I, 4, ad 2^{um}.

that revelation is reasonable and that reason is divine. This thought, which was held in solution in every system of Scholasticism from the extreme mysticism of Erigena to the extreme rationalism of Abelard (both of whom, though for different reasons, identified theology with philosophy), is now at last crystallized, and the Protestant as well as the Catholic apologist of Christianity will to-day acknowledge that nowhere can there be found a better statement of the relation between revelation and reason than in the principles formulated by St. Thomas. The doctrine of St. Thomas on this point is of interest not merely to the apologist, but also to the philosopher; for every effort at philosophical construction is an effort at establishing continuity. The Greeks, while they distinguished mind and matter, taught that there exists no antagonism between them, and it was in a similar spirit of constructive synthesis that St. Thomas, while clearly distinguishing the province of theology from that of philosophy, established once for all the continuity of the supernatural with the natural, of revelation with reason. It is this aspect of the question that gives it its importance in the history of philosophy.¹

(c) *Division of sciences.* St. Thomas divides the sciences, in accordance with Aristotle's scheme of classification, into *physical*, *mathematical*, and *metaphysical*.² All science is abstraction, that is, separation, or analysis, of the complex totality of phenomena; the physical, mathematical, and metaphysical sciences represent ascending grades of abstraction.³

(d) *Doctrine of universals.* All science is concerned with the abstract and, therefore, with the universal: of singular things, in so far as they are singular, there is no science. But the universal, though abstract, is real. St. Thomas regards the nominalist denial of the reality of universals as a denial of the reality

¹ Cf. *Cath. Univ. Bull.* (July, 1896), Vol. II, pp. 188 ff.

² In *VI^{um} Metaphysicorum*, Text. 2, Lect. 5.

³ Cf. *Opusc.*, XXXIV; in Roman edition, LXX, Q. V, Art. 1.

of all science. He does not, however, agree with the Platonic realists, who teach that the universal exists outside the mind *as a universal*, in the same way as it exists in the mind. The universal existed *ante rem* in the mind of God, as exemplar cause; it exists *post rem* in the human mind, as an idea or image extracted from concrete things; and it exists *in re*, as the essence or quiddity of things; but the universal *in re* is not formally universal: the mind, reflecting that the universal quiddity is predicable of many, invests this quiddity with the *formal aspect of universality*.¹

Quod est commune multis non est aliquid præter multa nisi sola ratione.² Cum dicitur universale abstractum, duo intelliguntur, scilicet ipsa natura rei et abstractio seu universalitas. Ipsa igitur natura rei cui accidit vel intelligi vel abstrahi vel intentio universalitatis, non est nisi in singularibus: sed hoc ipsum quod est intelligi vel abstrahi vel intentio universalitatis, est in intellectu.³

Licet natura generis et speciei numquam sit nisi in his individuïs, intelligit tamen intellectus naturam speciei et generis non intelligendo principia individuãntia: et hoc est intelligere universalìa.⁴

Universalìa, secundum quod sunt universalìa, non sunt nisi in anima. Ipsæ autem naturæ, quibus accidit intentio universalitatis, sunt in rebus.⁵

The sciences, therefore, are real because the universal is real. The sciences, however, differ in many respects: the same *method* is not to be employed in different sciences, neither is the same certitude to be sought in each.

Ad hominem bene disciplinatum, id est, bene instructum, pertinet ut tantum certitudinis quærat in unaquaque materia quantum natura rei patitur.⁶

Theology rests on the authority of revelation; in the other sciences the principal means of arriving at truth is the use of our own reason and the employment of induction or deduction, according to the nature of the science. *Authority* holds a very unimportant place: "Studium sapientiæ non est ad hoc quod

¹ Cf. p. 266.

² *Sum. Theol.*, I^a, LXXXV, 2, ad 2^{um}.

³ *C. G.*, I, 26.

⁴ *C. G.*, II, 75.

⁵ *In II^{um} De An.*, Lect. 12.

⁶ *In I^{um} Ethicorum*, Lect. 3.

sciatur quid homines senserint, sed qualiter se habeat veritas rerum."¹ St. Thomas maintains that in matters scientific the argument from authority is the weakest of all arguments,² and thus condemns those who would solve the problems of philosophy by an appeal to the works of Aristotle or of some other master.

(c) *Theory of knowledge.* St. Thomas' theory of knowledge is conditioned by his psychological doctrines. It is possible, however, to describe his epistemological doctrines in general terms without entering, for the present, into an account of his psychological system.

All knowledge begins with sense-knowledge.³ The senses, the intellectual faculties, and the authority of others are the sources of our knowledge, and, in normal conditions, they are reliable sources. With respect to the senses, St. Thomas, following Aristotle, distinguishes four classes of objects, the *sensibile per se*, the *sensibile per accidens*, the *sensibile proprium*, and the *sensibile commune*.⁴ The *sensibilia propria* are color, taste, sound, etc., and the *sensibilia communia* are size, motion, shape, etc. The former exist potentially in the object, independently of the sense; actually, however, taste, for example, does not exist except when it is perceived.⁵ But, while St. Thomas makes this concession to idealism, he maintains, in opposition to the fundamental tenet of the idealists, that what we first perceive is not the mental process, which takes place within us, but the physical counterpart of that process, which exists in the world outside us. He is an advocate of *presentative*, or *immediate*, as opposed to *representative*, or *mediate*, perception: he teaches that the senses are in immediate contact with the object, as far as consciousness is concerned, although, as we

¹ *De Caelo et Mundo*, I, Lect. 22.

² "Locus ab auctoritate quæ fundatur super ratione humana est infirmissimus." *Sum. Theol.*, I^a, I, 8, ad 2^{um}.

⁴ *Op. cit.*, I^a, XVII, 2, c.

³ *Op. cit.*, I^a, LXXVIII, 4, ad 4^{um}.

⁵ *In II^{um} De An.*, Lect. 16.

shall see, he holds that between the senses and the object there are certain media of communication (*species sensibiles*), which do not appear in direct consciousness.

Quidam posuerunt quod sensus non sentit nisi passionem sui organi . . . sed hæc opinio manifeste apparet falsa. . . . Species *secundario* est id quod intelligitur: id quod intelligitur *primo* est res.¹

He explains the *illusions of sense* by referring them to one or other of the following causes: (1) the sense-organ is not in its normal condition; (2) it is a question of a *sensibile per accidens*, not of a *sensibile per se*.² With regard to the *sensibilia communia*, St. Thomas does not realize the important part played by *interpretation* in processes which are apparently cases of intuitive perception. He admits, however, the fact that interpretation plays a part in these processes: "Naturas sensibilibus qualitatibus cognoscere non est sensus sed intellectus."³

Intellectual knowledge is derived from sense-knowledge. The intellect, by its immaterial energy, separates, or puts aside, all the material conditions of the sense-image, leaving the immutable, universal element which represents itself on the mind as an immaterial idea. The process is one of *abstraction* or *separation*. If, then, sense-knowledge is a source of truth, intellectual knowledge is also a source of truth; for the mind adds nothing to the sense-image; it merely brings to light the intellectual element therein contained.⁴

But, though it is customary to speak of the truth of the senses and of the truth of the act by which the intellect abstracts universal ideas, yet truth full-fledged, so to say, is not found except in judgment and reasoning.⁵ Now, we form a judgment by virtue of an innate power of the mind, by what may be called a natural sensitiveness to the light of evidence,—and propositions, as they present themselves to us, are evident either

¹ *Sum. Theol.*, I^a, LXXXV, 2.

² *Op. cit.*, I^a, LXXVIII, 3, c.

³ *Op. cit.*, I^a, XVII, 2, c.

⁴ *Cf. op. cit.*, I^a, LXXVI, 2, ad 4^{um}.

⁵ *Q. Disp. De Ver.*, I, 3.

immediately or through the medium of other and more evident propositions. In this way, by the power of judgment, we arrive at a knowledge of *first principles*, and at a knowledge of *conclusions* which, when organized, is properly called *science*.

But what is knowledge? St. Thomas describes it as a vital process in which the subject is rendered like the object by a process of *information*: "Omnis cognitio fit per assimilationem cognoscentis et cogniti."¹ He likens it to the process by which the seal impresses its form on the wax. The object, whether it be composed of matter and form or be pure form, is what it is by virtue of the form. Now, when the object becomes known, it impresses its form on the mind, causing the mind not *to be* the object, but *to know* the object. Moreover, in the act of knowledge, subject and object become one in the ideal order,² — an expression which means merely that the object becomes *known by us* and we become *knowing the object*. Beyond these somewhat general expressions St. Thomas does not attempt to describe the nature of knowledge, realizing perhaps the impossibility of describing knowledge in terms more elementary than the term *knowledge* itself.

2. **Logic.** In logic, St. Thomas did not make any notable addition to the doctrine of Aristotle. The *opusculum* entitled *Summa Totius Logicæ*, which was ascribed to St. Thomas, is the work of some disciple of the saint, perhaps of Hervé of Nedellec (died 1323). It is a compendium of the treatises which formed the body of Aristotelian logical doctrine.

3. **Anthropology.** The central doctrine in St. Thomas' teaching concerning man is that of the *substantial union of soul and body*. Body and soul are co-principles of the substantial unit which is man: they are united as matter and form. Complete substantial nature belongs neither to the soul alone nor to the body alone, but to the compound of both: it is the compound which *is* and *acts*. It is by virtue of the soul that man is a

¹ C. G., I, 65.

² Cf. *Sum. Theol.*, I^a, LV, 1, ad 2^{um}.

rational being, a substance, a being : it is by virtue of the soul that the body has whatever it possesses. But just as the body requires the soul in order to be what it is and to move and live, the soul requires the body for its natural being and operation.¹ It is true that the soul is superior to matter, that in the highest operations of the mind it is intrinsically independent of the body, and that it is capable of surviving the body ; but it is none the less true that there is no operation of the soul, however high, in which the body has not its share, and that, after its separation from the body, the soul is, as it were, in an unnatural state until it is reunited with the body after the body's resurrection.²

The soul is defined as *primum principium vitæ in his quæ apud nos vivunt*,³ and life is defined as self-originating motion : " Illud enim proprie vivere dicimus quod in seipso habet principium motus vel operationis cujuscumque." ⁴ Thus, although the eye, the heart, etc., are principles of vital functions, they are not the radical principles of those functions ; for if these, *as bodies*, were the *first* principles of life, all bodies would be endowed with life.⁵ The soul is therefore the radical principle of all vital functions.

Since *life* is the power of self-motion, or, as we should say, the power of adaptation, living beings are arranged in a scale of ascending perfection according to the degree in which they possess the power of self-motion. In this way St. Thomas is led to distinguish plant life, animal life, and intellectual life, and to this distinction corresponds the distinction of vegetative soul, sensitive soul, and rational soul.⁶ All life is a triumph of form over matter, of activity over inertia, of initiative force over indeterminateness, and the greater the triumph the higher the form of life.

¹ Cf. *In II^{um} De An.*, Lect. 1.

² *Q. Disp. De Anima*, Art. 1, ad 4^{um} ; *De Potentia*, V, 10 ; *De Spiritualibus Creaturis*, Art. 2, ad 5^{um}.

⁵ *Sum. Theol.*, I^a, LXXV, 1.

³ *Sum. Theol.*, I^a, LXXV, 1, c.

⁶ *Op. cit.*, I^a, XVII, 3.

⁴ *Q. Disp. De Ver.*, IV, 8.

The soul, then (and by soul is meant not merely mind, but the principle of *all* vital activity), is united substantially with the body. The union is no mere accidental union, as Plato taught; for consciousness tells us that it is the same substance which thinks and speaks and moves and eats.¹ Neither are there forms intermediate between soul and body, as the Neo-Platonists taught;² for although there is no quantitative contact between soul and body, there is the contact of immediate action and reaction (*contactus virtutis*), as the facts of consciousness prove. Thus does St. Thomas, taking his stand on the empirical principles of consciousness, simplify the problems of epistemology by regarding man as the blending of what in modern epistemology would be called self and not-self, and by refusing to look upon subject and object as separated by that chasm which every epistemologist since the days of Descartes has striven in vain to span.³

The soul is one, inextended, immaterial. Its immateriality is proved by the fact that in its intellectual operations it rises above all material conditions. It is present in every part of the body, although it does not exercise all its functions in each part of the body — it is present *totalitate essentiae*, but not *totalitate virtutis*.⁴ But, though the soul is one, it has several *faculties*, or immediate principles of action. In the *Summa Theologica*⁵ the necessity of admitting the existence of faculties of the soul is proved by metaphysical reasons; in *De Spiritualibus Creaturis*⁶ the same conclusion is reached from considerations of a psychological nature. The faculties of the soul are (1) *locomotive*; (2) *vegetative*, or *nutritive*; (3) (cognitive) *sensitive*; (4) (cognitive) *intellectual*; and (5) *appetitive*, which includes sensitive appetite and rational appetite, or will. This division is expressly attributed to Aristotle.⁷

¹ *C. G.*, II, 56; *Sum. Theol.*, I^a, LXXVI, 1, c.

² *Sum. Theol.*, I^a, LXXVI, 4, c.

³ Cf. *op. cit.*, I^a, LXXVI, 6, 7.

⁴ *Op. cit.*, I^a, LXXVI, 8.

⁵ I^a, LXXVII, 1.

⁶ Art. II.

⁷ *Sum. Theol.*, I^a, LXXVIII, 1.

All the faculties of the soul are vital, and their operations are immanent. Some, however, are wholly dependent on states of the organism, while others are immaterial, that is, independent of bodily states, or, more generally, of all the conditions of matter. To this class belong the intellectual faculties. St. Thomas, it is true, admits that, as Aristotle taught, there is nothing in the intellect which did not come through the senses ; nevertheless he maintains, and in this he is true to Aristotelian principles, that there is an essential distinction between sense and intellect. *The intellect is incorporeal*

(a) Because we can know incorporeal things :

Nihil agit nisi secundum suam speciem, eo quod forma est principium agendi in unoquoque. Si igitur intellectus sit corpus, actio ejus ordinem corporum non excedet. Non igitur intelliget nisi corpora. Hoc autem patet esse falsum : intelligimus enim multa quæ non sunt corpora. Intellectus igitur non est corpus.¹

(b) Because of our power of reflection :

Nullius corporis actio reflectitur supra agentem. Intellectus autem supra seipsum agendo reflectit. Intelligit autem seipsum non solum secundum partem, sed secundum totum. Non est igitur corpus.²

(c) Because of the universality and necessity which the idea possesses :

Propria operatio hominis, in quantum hujusmodi, est intelligere : per hanc enim differt a brutis. Intelligere autem est universalium et incorruptibile, in quantum hujusmodi.³

The intellect, although immaterial and therefore intrinsically independent of the body, *depends on the body extrinsically* and, as it were, accidentally ; for the soul, being the weakest and most imperfect of spiritual substances, being, in fact, substantially incomplete without the body, cannot exercise its intellectual functions without the coöperation of the bodily senses. Having no innate ideas, it must obtain the matter of thought from

¹ *C. G.*, II, 49.

² *Ibid.*

³ *Op. cit.*, II, 79 ; cf. also *Sum. Theol.*, I^a, LXXV, 2.

the world outside; the senses are, therefore, the channels of communication between the soul and the objects of knowledge. This extrinsic, or accidental, dependence of intellect upon sense explains the phenomenon of mental fatigue:

Si vero in intelligendo fatigetur corpus, hoc est per accidens, in quantum intellectus indiget operatione virium sensitivarum, per quas ei phantasmata præparentur.¹

Intellect, therefore, while it transcends the world of sense, is accompanied in all its operations by bodily states, to which the operations of the intellect are correlated. St. Thomas is as careful to avoid the ultra-spiritualism of those who deny all interaction or correlation between the acts of the intellect and the organism, as he is to avoid the materialism of those who make the acts of the intellect depend intrinsically on material conditions. His doctrine on this point, while it in no way compromises the spiritual and immaterial nature of the principle of pure thought, leaves full scope to empirical psychology and to psycho-physical investigation.

From the distinction between intellect and sense, St. Thomas infers the conclusion that the *soul is immaterial*. It is a principle of Scholastic philosophy that action is, so to speak, a measure of existence: *agere sequitur esse*. The effect cannot be greater than the sum of its causes: if, therefore, the intellect, in the processes of pure thought, transcends all material conditions, it follows that the soul, which is the radical principle of such processes, is itself immaterial.

Sic igitur ex operatione animæ humanæ modus esse ipsius cognosci potest. In quantum enim habet operationem materialia transcendentem, esse suum est supra corpus elevatum, non dependens ab eo.²

The *immortality of the soul*³ follows from its immateriality. The proofs of immortality, although differently enunciated in

¹ *Sum. Theol.*, Ia, LXXV, 3, ad 2^{um}.

² *Q. Disp. De An.*, Art. 1.

³ *Cf. Cath. Univ. Bull.* (April, 1900), Vol. VI, pp. 154 ff.

different portions of the writings of St. Thomas, may be said to converge on one line of argument: the soul is immaterial; therefore it is naturally incorruptible. For instance, in the *Quæstio Disputata De Anima*¹ St. Thomas argues that a compound is subject to corruption *per se* by the loss of the form which gives it being, while a form, although incorruptible *per se*, may be corruptible *per accidens*; that is to say, it is liable to destruction if it is merely that by which the compound is, and if it has no being independently of the compound. Now, the soul is a form, and therefore it is not corruptible *per se*. It is a form independent of the body as to its highest operations, and therefore it is independent of the body as to its being; consequently it is not corruptible *per accidens*. Therefore neither *per se* nor *per accidens* is the soul subject to corruption. Towards the end of the article in which the foregoing argument is enunciated, St. Thomas shows that all who denied the natural immortality of the soul did so either (1) because they held that the soul is a material substance; or (2) because they held that the soul is intrinsically dependent on matter even in its intellectual operations; or (3) because they held that the principle of intellectual knowledge is not a faculty of the individual soul, but something separate (*intellectus separatus*), which is immortal, while the individual soul is corruptible. The argument is repeated in *Contra Gentiles*, II, 55; in II, 79, of the same work, the form of the argument is slightly changed:² the soul is perfected by knowledge and virtue. Now, all knowledge and all virtue are conditioned by a certain degree of separation from matter: every idea that we acquire, every act of virtue that we

¹ Art. 14.

² "Nulla res corrumpitur ex eo in quo consistit propria sua perfectio. Perfectio autem animæ consistit in quadam abstractione a corpore: perficitur enim anima scientia et virtute: secundum scientiam autem tanto magis perficitur quanto magis immaterialia considerat; virtutis autem perfectio consistit in hoc quod homo corporis passiones non sequatur sed eas secundum rationem temperet et refrenet. Non ergo corruptio animæ consistit in hoc quod a corpore separetur."

perform, lifts us above the material conditions of life and adds to the perfection of the soul. Death, therefore, which is a complete separation of the soul from matter, perfects rather than destroys the soul.

Arguing from the same empirical principles, — principles, namely, which are founded on a study of the operations of the mind, — St. Thomas concludes that *the soul is created*. If the soul, in its intellectual acts, rises above the conditions of matter, it is impossible that the soul could be produced by material forces: matter cannot produce an immaterial effect. For the same reason — because of its immateriality — the soul cannot by any agency be evolved out of the potency of matter. It follows that it is created.¹ At the moment of creation the soul is infused into the body: “*Creando infunditur et infundendo creatur*,” is the Scholastic formula. The soul is naturally destined for the body; there is, consequently, no reason why it should exist before its union with the body, as Plato taught.

It will be perceived that St. Thomas' system of rational psychology is based on experience. The central doctrine of this system — the substantial union of soul and body in man — is inferred from the facts of consciousness, revealing to us the oneness of the vital principle from which proceed not merely our intellectual actions, but also every other function of the living organism. It is from the facts of consciousness that the nature of the idea is determined, and from the universality and necessity of the idea are deduced in turn the immateriality and immortality of the soul, as well as the creationist hypothesis of the origin of the soul. The method of St. Thomas' psychology is, therefore, empirical, and not, as is too frequently alleged, *a priori*. It is true that St. Thomas appeals to such maxims and formulas as “*Agere sequitur esse*.” But it should be remembered that such formulas are not *a priori* principles or premises arbitrarily assumed; they are conclusions established by empirical

¹ Cf. *Sum. Theol.*, I^a, CXVIII, 2, c; C. G., II, 89, etc.

or rational investigation, and, as such, are perfectly legitimate principles of rational psychology—in the same way as the law of the conservation of energy, the law of the division of physiological labor, or any other generalization inductively established, has its legitimate application in physics or biology.

Genesis of knowledge. St. Thomas teaches that there are no innate ideas: that the mind is at first a *tabula rasa*, pure potency in the intellectual order, just as *materia prima* is pure potency in the physical order. All knowledge begins with sense-knowledge: "Nihil est in intellectu quod prius non fuerit in sensu." Thus, for example, he says:¹

Deficiente aliquo sensu, deficit scientia eorum quæ apprehenduntur secundum illum sensum; sicut cæcus natus nullam potest habere notitiam de coloribus.

The intellect, it is true, knows itself by its own act, but the act of the intellect presupposes the previous exercise of the senses.²

St. Thomas does not discuss in detail *the nature of sensation*, nor the manner and mechanism of the process of sense-perception. He simply describes in a general way the conditions of sense-knowledge and the action of the object on the senses. Sensation, he teaches, is the act by which the object produces a modification in the animated organism. The senses, therefore, are purely passive or, at most, reactive; they do not produce anything; they neither make the object nor do they, as modern theories of apperception maintain, group together the qualities of the object and unify them. The object acts; the senses react: "Sensus non est virtus activa sed passiva . . . sensus autem comparatur ad sensibile sicut patiens ad agens, eo quod sensibile transmutat sensum."³ The reaction is described as follows:

Sentire, quantum ad ipsam receptionem speciei sensibilis, nominat passionem . . . sed, quantum ad actum consequentem ipsum sensum perfectum per speciem, nominat operationem.⁴

¹ *Sum. Theol.*, I^a, LXXXIV, 3.

² *Cf. op. cit.*, I^a, LXXXVII, 1.

³ *Q. Disp. De Ver.*, XXVI, 3, ad 4^{um}.

⁴ *In I^{um} Sent.*, Dist. LX, I, 1, ad 1^{um}.

Confining our attention to the passive phase of sensation, we next inquire, What is the nature of *the change produced by the object in the organism*? It is neither wholly material nor wholly immaterial; it is a vital change. It is not entirely material, because color, for example, is not received in the eye in such a way as to color the eye; neither is the change purely immaterial, because we are speaking of the modification of material organs by material qualities. When, therefore, St. Thomas uses the phrase *immutatio spiritualis*¹ to designate the change produced in the organs of sense-perception, he uses it as opposed to *immutatio naturalis*, or wholly material change. This "spiritual" change is the famous *species sensibilis*, which is consequently nothing but a *passio*, or *affectio*, of the peripheral sense-organs, a mode of motion, and by no means a substantial entity. Now, according to a metaphysical principle well known to St. Thomas as a Peripatetic formula, *actio* and *passio* are but two phases of the same reality, like the concave and the convex of the same curve.² The action of the object and the modification produced by it in the sense are one and the same phenomenon, and the *species sensibilis* may therefore be defined as *the physical determinant of sensation, inasmuch as it is received in the animated organism*. The *species sensibilis* is not a miniature object; neither is it something which we first perceive in sensation, and by means of which we are led to perceive the object. It is merely the vital phase of the stimulative action of the external object, — a medium of communication between object and subject, but not a medium in the order of knowledge; for in normal conditions it does not rise into direct consciousness at all, the first thing perceived being the object itself. It is called a *species* because *by means of it* (in the sense just explained) the object is perceived.

¹ *Sum. Theol.*, I^a, LXXVIII, 3, c.

² For instance, in *In III^{um} De An.*, Lect. 2, St. Thomas writes: "Sicut dictum est in tertio Physicorum quod actio et passio sunt unus actus, subjecto, sed differunt, ratione, prout actio signatur ut ab agente, passio autem ut in patiente."

This detailed explanation of the Thomistic doctrine of *species sensibilis* is rendered necessary by the persistent misrepresentation of that theory on the part of many writers on Scholastic psychology.¹ The misunderstanding is perhaps to be explained by the fact that St. Thomas has little to say about the *species sensibilis*. In the *Summa Theologica*² he merely points out the difference between the Aristotelian doctrine of *species* and the atomistic doctrine of effluxes, and adds that the *species* is a mode of motion :

Operationes sensitivæ partis causantur per impressionem sensibilibus in sensum, non per modum defluxionis, ut Democritus posuit, sed per quamdam operationem.

St. Thomas does not attempt to explain in what this *operatio* — this mode of motion, or as we should call it, vibration — consists.

Returning now to the study of the active phase of the process of sensation, we find that according to St. Thomas, the *species* is first impressed on the sense (*species impressa*) ; then consciousness responds and by the *actus consequens impressionem* writes out, so to speak, a representation of the object, called the *species expressa*. Sensation in the passive phase is not knowledge ; for there is no knowledge without consciousness : it is only in the active phase that sensation becomes knowledge properly so called.³

But how do we *rise from sense-knowledge to intellectual knowledge* ? how do we derive from the world of material things the universal and immaterial, which is the object of pure thought ? St. Thomas recalls, in his answer to this question, the Aristotelian distinction between active and passive intellect. These, he maintains, are two faculties, not one and the same power viewed under two different aspects.⁴ The object as it presents itself to the senses is indeed contingent and singular ; but,

¹ Cf., for instance, Reid, *Works*, p. 267.

² I^a, LXXXIV, 6, c.

³ Cf. *In I^{um} Sent.*, Dist. XL, I, 1, ad 1^{um}.

⁴ Cf. *Sum. Theol.*, I^a, LXXIX, 7, and *In I^{um} Sent.*, Dist. XVII, Q. II, Art. 1.

hidden beneath the surface qualities, which give to the object its individuality and contingency, is the unalterable nature, or essence, which is universal and necessary. The *active intellect*, by virtue of its illuminative power, separates what is contingent and particular from what is necessary and universal in the object, in this way causing the universal and necessary element in the object to stand forth in the clear light of its own intelligibility, and rendering actually intelligible what was only potentially intelligible before. The actually intelligible element acts upon the *passive, or receptive, intellect* in the same way as color acts upon the eye, producing the *species intelligibilis impressa*; on being received into intellectual consciousness, this impression becomes the intellectual expression of the object in the mind, the mental image of the object (*species intelligibilis expressa, verbum mentis*).¹ The idea which results from this abstractive process has a twofold aspect: *entitatively* considered, it is an accident or quality of the mind in which it is; *representatively* considered, it is an image, or representation, of the object, functioning, not as a medium *in which* we see the object, — for that would be to open the door to subjectivism, — but as a medium *by which* the object acts on our consciousness. The analogy between the function of the *species intelligibilis* and that of the *species sensibilis* is perfect.²

With regard to the *chronological order of the genesis of our ideas*, St. Thomas holds that the first idea which the human mind acquires is the idea, or notion, of Being. By the notion of Being we must not understand a definite concept, such as the idea of Being which is the object of metaphysical analysis, but a vague concept of reality more aptly expressed by the word *thing* than by the word *Being*. St. Thomas adopts Avicenna's formula: "Quod primum cadit in intellectu est ens." It is only after a long process of training that the mind, by reflecting on

¹ Cf. C. G., II, 73; *Sum. Theol.*, I^a, LXXXV, 1; *Q. Disp. De Ver.*, IV, 2.

² Cf. *Sum. Theol.*, I^a, LXXXV, 2; *Philosophical Review*, November, 1903.

its own acts, comes to know itself. The senses, the natural windows of the soul, are open on the side which looks out on the external world; consequently, our first knowledge is sense-knowledge, and the first idea which we glean from sense-knowledge is naturally the most imperfect, that is, the vaguest and least definite of notions, — the idea of Being.¹

Ontologists have endeavored to cite the authority of St. Thomas in favor of their doctrine that (1) God is the first object of our knowledge, and (2) in this knowledge of God we know all things else. St. Thomas, it need hardly be said, is far from confounding with the idea of God the idea of Being in general, which is the first object of knowledge, and the constant substratum and indefinite residuum in all our processes of ideation. He is careful to keep apart the concept of Being and the concept of God; for the former is merely an abstraction of the mind, existing as such nowhere except in the mind, and the latter is the representation of the first and greatest reality. When, therefore, he says, "(Entis) intellectus includitur in omnibus quæcumque quis apprehendit,"² he is speaking of the idea of Being which is the substratum of all our ideational processes, and when he says that we see all things in God, he explains his meaning as follows:

Omnia dicimur in Deo videre et secundum Ipsum omnia judicare, in quantum per participationem Sui luminis omnia cognoscimus et dijudicamus, . . . sicut etiam omnia sensibilia dicimur videre et judicare in sole, id est per lumen solis. Sicut ergo ad videndum aliquid sensibiliter non est necesse quod videatur substantia solis, ita ad videndum aliquid intelligibiliter non est necessarium quod videatur essentia Dei.³

The *emotions* are treated by St. Thomas under the name *passiones*, by which word, following St. Augustine, he translates the Greek word *πάθη*. It may seem strange to us that the schoolmen should treat of the emotions in connection with appetite

¹ *Op. cit.*, I^a, LXXXV, 3.

² *Op. cit.*, I^a II^a, XCIV, 2, c.

³ *Op. cit.*, I^a, XII, 11, ad 3^{um}; cf. Piat, *Quid Divini, etc.* (Paris, 1890).

and will, refusing, apparently, to recognize the importance of the emotions as mental states deserving to be coördinated with cognitive and volitional states in a classification of mental phenomena. Still, when we examine the nature of the emotions, we shall realize that they are intimately connected with volitional or appetitive states — that all emotion is, in a certain sense, a response to good or evil perceived.

St. Thomas defines passion in its broadest sense as the change from a state to its contrary, or, more strictly, from a more perfect to a less perfect state.¹ The soul, being incorporeal, has no contrary states; still, by reason of the body it can pass from a more perfect to a less perfect state, and may be said by reason of the body to have contrary states.² All the passions belong to the sensitive appetite, and are divided into two great classes, *passiones concupiscibiles* and *passiones irascibiles*, according as they belong to the concupiscible appetite, which has for object the good or evil as agreeable or repugnant in itself, or to the irascible appetite, which has for object the good apprehended as subject to some circumstance of difficulty or danger.³ The emotions of the higher, or more spiritual, kind, that is, those which belong to the intellectual appetite, are not passions properly so called, because they do not imply a *transmutatio corporalis*.⁴

Will is the faculty which has³ for its object the good apprehended by reason. Appetite is concerned with the *good*, just as cognition is concerned with the *true*. Cognition goes before appetite, and the nature of the latter depends on the nature of the former: sensuous appetite, the tendency towards what is good for the body, follows sense-perception; rational appetite, or will, the tendency towards the rational good, follows intellectual knowledge. As the intellect cannot but assent to first principles, so the will cannot but tend towards good in general, *bonum*

¹ Cf. *Q. Disp. De Ver.*, XXVI, 1. ² Cf. *Q. Disp. De Ver.*, XXVI, 4 and 5.

³ *Sum. Theol.*, I^a II^æ, XXII, 1. ⁴ *Sum. Theol.*, I^a II^æ, XXII, 2, ad 3^{um}.

commune. With regard, therefore, to good in general, there is no freedom of choice.¹ Choice is possible only in reference to particular goods. Now, the intellect presents a particular good in such a manner that, while we perceive it to be good, we perceive at the same time, that, without it, good in general, or universal good, may be attained. This perception is the ground of freedom. The root of freedom (*radix libertatis*) is, therefore, the reason, and freedom of choice (*liberum arbitrium*) may be said to include the action of the intellect as well as that of the will. "Pro tanto necesse est quod homo sit liberi arbitrii ex hoc ipso quod rationalis est."²

Comparing intellect and will, St. Thomas decides that, absolutely speaking, intellect is superior to will; although if we consider that the object of will perfects the will, and that some of the objects of will are superior to the object of intellect, we must, he says, decide that in this respect (*secundum quid*) will is superior to intellect.

Melior est amor Dei quam cognitio; e contrario autem, melior est cognitio rerum corporalium quam amor. Simpliciter tamen, intellectus est nobilior quam voluntas.³

4. **Cosmology.** The eternity of the world is not contrary to reason, in this sense, that, absolutely speaking, God could have created *something, ab æterno*; and therefore the origin of the world in time is not a truth demonstrable by reason.⁴ The world, as it exists, is good. Its goodness is apparent if we consider the end for which it was created. It is not, however, the most perfect world possible; for God in His infinite power could and can create a more perfect world.⁵ The world was created out of nothing. For all finite being, whether potential or actual, is dependent on God. Even eternal matter, if it existed before the production of the first forms of actual being,

¹ *Op. cit.*, I^a, LXXXII, 1, c. ² *Op. cit.*, I^a, LXXXII, 3, c.

³ *Op. cit.*, I^a, LXXXIII, 1, c. ⁴ *Op. cit.*, I^a, XLVI; cf. *Quodl.*, III, Art. 21.

⁵ *Q. Disp. De Ver.*, XXIII, 4.

must have originated by virtue of the Divine Will. "Creatio est emanatio totius esse ex non ente, quod est nihil."¹

Every created being is composed, as we shall see, of potency and actuality. Everything in the visible universe is composed of matter and form. Matter is potency; *materia prima* is utter indetermination, — potentiality and nothing more. It is described as "ingenerabilis et incorruptibilis; una, unitate ordinis tantum." And, again: "omnium generabilium et corruptibilium est eadem materia. . . . Est sua potentia passiva, sicut Deus est potentia activa."² Form confers actuality and specific determination: "Forma, secundum id quod est, actus est, et per eam res actu existunt."³ Form is the principle of action and being: in living things it is the principle of life, and in all material things it is the source of all qualities, even of impenetrability and extension. It is important, in view of modern theories of matter, to note that according to the schoolmen the actual extension of a body is due to the form, although the potency of extension comes from the matter. It is because matter contains the potency of extension that St. Thomas says, "Quantitas se tenet ex parte materiæ."⁴

The form is the source of all actuality in material substances; it is the determining principle, causing the substance to be what it is: it is, therefore, the *principle of specific distinction*. The *principle of individuation*, namely, that by which individuals of the same species are differentiated, is matter, — not matter in general, for that enters into the specific definition, and is common to all members of the species, but matter terminated by its dimensions, "Materia determinatis dimensionibus signata."⁵ It

¹ *Sum. Theol.*, I^a, XLV, 1, c.

³ *C. G.*, II, 30.

² *Cf. op. cit.*, I^a, LXVI.

⁴ *In IV^{um} Sent.*, Dist. XII, 1, 2.

⁵ *Cf. In III^{um} De An.*, Lect. 8: "In omnibus habentibus formam in materia non est omnino idem et res et quod quid est ejus. . . . Manifestum est enim quod quantitas immediate inhæret substantiæ; qualitates autem sensibiles in quantitate fundantur. Quædam ergo sunt formæ quæ materiam requirunt sub determinata dispositione sensibilibus qualitatibus; et hujusmodi sunt omnes formæ naturales." *Cf. also De Ente et Essentia*, Cap. 2.

follows from this (and St. Thomas admits the inference) that, since the angelic nature is form without matter, there is no numerical distinction among spiritual substances: "Sequitur quod impossibile sit esse duos angelos unius speciei."¹ "Quot sunt individua, tot sunt species."² The human soul is like the angelic nature inasmuch as it is spiritual, but unlike it inasmuch as it is the substantial form of the body. It is individuated by the body, and after its separation from the body each soul still retains a certain *habitus ad corpus* which distinguishes it from other human souls.³

The principle, "Omne quod movetur, quantum ad aliquid manet et quantum ad aliquid transit,"⁴ is the basis of the Thomistic as it was of the Aristotelian doctrine of matter and form. Both St. Thomas and Aristotle assumed that there are substantial changes, and, in order to explain substantial change, they postulated the existence of two substantial principles, the one (*matter*) permanent and the other (*form*) transient.

Space, although real, is not something distinct from the dimensions of existing bodies; it is not infinite, for it is coterminous with the limits of the actual universe, beyond which nothing exists except potential space.⁵

Time. St. Thomas accepts the Aristotelian definition of time. In the *Summa Theologica*⁶ he teaches that it is the mind which *alternates* the present instant, thus, as it were, constituting the flow, or succession which is time: "Fluxus ipsius nunc, secundum quod alternatur ratione, est tempus." And in the *Commentaries on the Books of Sentences*⁷ he quotes with approval the Aristotelian principle, "Si non esset anima, non esset tempus."

Neither St. Thomas nor any of his contemporaries imagined the *heavenly bodies* to be composed of the same matter as that

¹ *Sum. Theol.*, I^a, L, 4, c.

² *De Ente et Ess.*, Cap. 5.

³ Cf. *Sum. Theol.*, I^a, LXXVI; *Q. Disp. De An.*, Art. 20; *De Spir. Creat.*, 2, 8.

⁴ *Sum. Theol.*, I^a, IX, 1.

⁶ I^a, X, 4, ad 2^{um}.

⁵ Cf. *In IV^{um} Physicorum*, Lect. 6.

⁷ I, Dist. XIX, II, 1.

of the physical world around us. The matter of the terrestrial world is made up of the four elements ; celestial matter is different from terrestrial matter or is, at most, only analogous to it.¹ The heavenly bodies are incorruptible, because in them the form fills all the potency of the matter : “ *Illa forma sic perficit illam materiam quod nullo modo in ea remanet potentia ad esse, sed ad ubi tantum.* ”²

5. **Metaphysics and Natural Theology.** *Being* is that which exists or can exist either in the mind or outside the mind.³ It is opposed to *Not-Being* (*nihil*). The notion of Being is peculiar in this, that it can neither be defined nor divided, because of the simplicity of its comprehension and the universality of its extension. Being is, therefore, reduced to lower classes, such as substance, animal, man, not by adding some *difference* distinct from Being itself, but by bringing out explicitly in the lower classes what is implicitly contained in the comprehension of the notion of Being in general. Hence, Being is not to be predicated univocally of its lower classes.⁴

Being is the most universal of notions ; it is, in fact, *transcendental*, that is to say, extending above and beyond all classes. It includes the highest reality as well as the lowest, — God, Who is pure actuality, as well as *materia prima*, which is mere potency. Between these two poles of existence range all created beings ; for in everything created there is a dual composition of actuality and potency, *actus et potentia*. Even in the highest of the angels, immaterial as he is, there is not only a composition of essence and existence, — of that by which he is, and the act of existence, — but also a composition of substance and accident. In material things there is a threefold composition : (1) *of essence*

¹ *Sum. Theol.*, I^a, LXVI, 2.

² *Ibid.* According to St. Thomas, intelligences move the heavenly spheres : “ *Ad hoc autem ut moveat, non oportet quod uniatur ei ut forma sed per contactum virtutis, sicut motor unitur mobili.* ” *Op. cit.*, I^a, LXX, 3.

³ *Cf. op. cit.*, I^a, III, 4.

⁴ *C. G.*, I, 25 ; *Sum. Theol.*, I^a, III, 5.

and existence ; (2) of substance and accident ; and (3) of matter and form. God alone is free from all composition ; in Him there is no matter or potency of any kind : His essence is His existence, His action is His substance, He is pure actuality, *Actus Purus*.¹ Thus does the metaphysics of St. Thomas point heavenward not only in the ultimate problems of the existence and nature of God, but also in its initial concept, — the dualism of all created being.

The principles of being in the ontological order (*prima principia essendi*) are the four causes, — *matter, form, efficient cause, and final cause*. Each of these is, in its own way, a cause, in so far as the effect depends on it.² The principles of being — in the logical order (*prima principia cognoscendi*) are immediate analytical truths, sometimes known as *axiomata* or *dignitates*. The first of these, the starting point of all demonstration, is the *principle of contradiction* ; for just as the notion of Being is the first object of the act of ideation and that on which all subsequent ideation is based, so the principle of contradiction, which springs, as it were, from the first elementary analysis of the notion of Being, is the first object of the act of judgment and the foundation on which all our other judgments rest.³

The highest classes of being are the categories, — *substance*, etc. St. Thomas, following Aristotle, distinguishes the *first substance*, which is the individual, or hypostasis, and the *second substance*, which is the universal substantial nature abstracted from the individual. First substance really exists as such. Second substance does not exist as such, except in the mind. It is the quiddity, or essence, which is expressed by the definition, and which, as thus defined, exists in the mind alone ; for in concrete things it is individuated.⁴

¹ Cf. *op. cit.*, I^a, III, 4 ; VII, 2.

² *Op. cit.*, II^a II^e, XXVII, 3, c.

³ In *IV^{um} Metaphysicorum*, Lect. 6.

⁴ Cf. *De Ente et Ess.*, Cap. 4 ; *Sum. Theol.*, I^a, XXIX, 2.

The existence of God is a truth which is *per se nota quoad se*. The proposition *God exists* is analytical; for if we could comprehend the subject of the proposition, we should see immediately that it includes the predicate, — that of itself the Divine Nature includes existence. But we cannot adequately comprehend the subject of the proposition. For us, therefore (*quoad nos*), the proposition *God exists* is not self-evident or analytical. Consequently it must be demonstrated.¹

St. Thomas, after examining and rejecting² St. Anselm's ontological argument, proceeds³ to point out the five ways in which, by arguing from effect to cause (*a posteriori*), the existence of God may be proved. These ways are: (1) from the principles that whatever is moved is moved by something else (*quidquid movetur ab alio movetur*), and that an infinite series of moving agents is impossible (*non est procedere in infinitum*); (2) from the relation between cause and effect, — “Non est possibile quod in causis efficientibus procedatur in infinitum”; (3) from the relation of the contingent to the necessary, — “Si omnia sunt possibilis non esse, aliquando nihil fuit in rebus: non ergo omnia entia sunt possibilis, sed oportet aliquid esse necessarium in rebus”; (4) from the different degrees of perfection in things which exist, — “Magis et minus dicuntur de diversis, secundum quod appropinquant diversimode ad aliquid quod maxime est”; (5) from the order and adaptation of the universe, — “Ea quæ non habent cognitionem non tendunt in finem, nisi directa ab aliquo cognoscente et intelligente.”

But although we can know *that* God exists we cannot comprehend *what* He is. Not even in that unobstructed vision of the Divine Nature which constitutes the supreme happiness of the blessed in heaven can the human mind fully and adequately comprehend the nature of God.⁴ Nevertheless, even in this life we can attain an imperfect knowledge of what God

¹ *Sum. Theol.*, I^a, II, 1.

² *Op. cit.*, I^a, II, 1, ad 1^{um}.

³ *Op. cit.*, I^a, II, 3.

⁴ *Op. cit.*, I^a, XII, 7.

is ; for we can proceed (1) by way of *analogy*, that is, by purifying from all imperfection attributes which denote perfection in created things, and predicating of God attributes thus sublimated ; and (2) by way of *negation*, that is, by excluding from God such attributes as imply imperfection, and thus determining what God *is not*.¹ Proceeding by this twofold method, St. Thomas shows that God is pure actuality (*Actus Purus*) ; from which it follows that He is infinite, perfect, one, immutable, eternal, etc.

In relation to creatures, God is *Creator* and *Preserver*. He is the first efficient cause on whom all finite being depends,—for He made all creatures out of nothing ; He is also the first exemplar cause, because He made all things according to the ideas, or types, which existed in the Divine Mind through all eternity. He is, moreover, the preserver and ruler of the world ; He watches over all His creatures and conserves them ; for without His sustaining hand they would return to the nothing out of which He brought them.² He coöperates in all our actions, in the natural as well as in the supernatural order.³ Finally, He is the *ultimate end* for which all things were made, and to which all rational creatures tend to return.⁴

This last consideration brings us to St. Thomas' ethical doctrines.

6. Moral and Political Doctrines. The object of all appetite is the *good* ; the end of all human action is happiness. Universal good, which is the conscious or unconscious aim of all rational action, is fully realized in the infinite good, which is God. God alone, as St. Augustine taught, can fill the void of the human heart ; and man will not rest until he attains the happiness which leaves no desire unsatisfied. St. Thomas teaches that it is derogatory to the dignity of man to seek *final and ultimate happiness* in anything short of the infinite good.⁵

¹ *Op. cit.*, I^a, XII, 12.

² *Op. cit.*, I^a, CV, 5.

³ *Op. cit.*, I^a II^a, III, 8.

² *Cf. op. cit.*, I^a, CIV, 1.

⁴ *Op. cit.*, I^a, XLIV, 4.

Although the knowledge and love of God, in which consists the enjoyment of the infinite good, are to be fully realized only in the next life, yet here on earth there is an imperfect form of happiness which man may attain. "*Aliqualis beatitudinis participatio in hac vita haberi potest; perfecta autem et vera beatitudo non potest haberi in hac vita.*"¹ As constituents of this imperfect happiness, St. Thomas mentions health, external goods, and the society of friends.²

The *moral goodness or evil of an action* depends ultimately on whether the action leads to or averts from the end for which man was created, and proximately on the object, circumstances, and purpose of the action itself.

Omnis actio in quantum habet aliquid de esse in tantum habet de bonitate; in quantum vero ei aliquid deficit de plenitudine essendi, in tantum deficit a bonitate et sic dicitur mala.

If object, circumstances, and end (intention) are good, the action is good; if any of these is evil, the action is evil. Hence the Scholastic adage, "*Bonum ex integra causa; malum ex quocumque defectu.*"³

Virtue is defined,⁴ "*Bona qualitas mentis, qua recte vivitur, qua nullus male utitur.*" The theological virtues — faith, hope, and charity — are infused; natural virtues, whether intellectual or moral, are acquired by exercise in the actions pertaining to such virtues, although the aptitude for one virtue or another, as well as the general aptitude for virtue, is part of the natural endowment of man.

*Virtutes in nobis sunt a natura secundum aptitudinem et inchoationem, non autem secundum perfectionem, præter virtutes theologicas, quæ sunt totaliter ab extrinseco.*⁵

St. Thomas follows the Aristotelian classification of moral virtues, basing it on the division of the objects of the passions.⁶

¹ *Op. cit.*, I^a II^æ, V, 3.

² *Op. cit.*, I^a II^æ, IV, 6, 7, 8.

³ *Op. cit.*, I^a II^æ, XVIII, 1.

⁴ *Op. cit.*, I^a II^æ, LV, 4.

⁵ *Op. cit.*, I^a II^æ, LXIII, 1.

⁶ *Op. cit.*, I^a II^æ, LX, 4.

Sometimes¹ he divides moral virtues into four principal, or cardinal, virtues.

Law is the extrinsic principle of morality. It is defined "Quædam ordinatio rationis, ad bonum commune ab eo qui curam communitatis habet promulgata."² A law, therefore, in order to be obligatory, must be reasonable; it must be for the good of the community; it must issue from the proper authority, and it must be duly promulgated. St. Thomas distinguishes *eternal*, or *divine law*; *natural law*, which is a participation of the divine law and is promulgated by being written "in the fleshly tables of the heart"; and *positive law*,³ which is a derivation from eternal law and is divided into *divine*, *ecclesiastical*, and *civil law*.⁴

The State. The treatise *De Regimine Principis* is now universally conceded to be the work of two authors. The first two books are undoubtedly to be ascribed to St. Thomas;⁵ the other two were added by some disciple, probably by Ptolemy of Lucca. In the first two books of *De Regimine Principis*, in the commentaries on the *Politics* of Aristotle, and elsewhere in his different works St. Thomas expounds the following political doctrines.

(a) Man is naturally ordained for the society of his fellow-men: "Est homini naturale quod in societate multorum vivat."⁶

(b) Authority in civil society must have in view the public good; if it lose sight of this, it becomes unjust, anti-social, and tyrannical.⁷ Tyrannical authority is held in check by the *authority of the Church*, which provides for the spiritual welfare of all the faithful, and has the power, at least in the case

¹ *Op. cit.*, I^a II^a, LXI.

³ *Cf. op. cit.*, I^a II^a, XCI.

² *Op. cit.*, I^a II^a, XC, 4.

⁴ *Cf. op. cit.*, I^a II^a, XCIII ff.

⁵ De Maria, in his edition of the *Opuscula* (3 vols., Rome, 1886), includes merely the first four chapters of the second book among the genuine writings of St. Thomas. *Cf.* Vol. II, p. 42.

⁶ *De Regimine Principis*, I, 1.

⁷ *Ibid.*

of the apostasy of the tyrant, to absolve his subjects from obedience on the ground that the ruler is an apostate.¹ Besides, if the rule of a tyrant is contrary to public good or to divine law, it ceases to bind in conscience.²

(c) Tyrannical power is also held in check by the *popular will*. Tyrannicide is to be condemned.³ The redress to which the subjects of a tyrant have a just right must be sought, not by an individual, but by an authority temporarily constituted by the people and acting according to law.

Nec putanda est talis multitudo infideliter agere tyrannum destituens etiam si eidem in perpetuum se ante subjecerat: quia hoc ipse meruit in multitudinis regimine se non fideliter gerens.⁴

(d) The *aim of the state* is not merely economical, but also moral; and from this principle St. Thomas deduces conclusions which are in remarkable accordance with modern political theories—for example, that it is the duty of the state to provide for the education of all its members and to see that no citizen suffers want.⁵

(e) St. Thomas has no predilection for one *form of government* rather than another. He argues, on general grounds, that the unity of society is better secured by the rule of one than by the rule of the few or of the many. Still, he maintains that the aristocratic and democratic forms of government are as legitimate as the monarchical form. He sets forth the advantages of a constitution in which all have a voice in the government of the state, “Ut omnes aliquam partem habeant in principatu: per hoc enim conservatur pax populi,”⁶ and he lays down the general principle that it is not the form of government, but the fidelity with which the government adheres to

¹ “Aliquis per infidelitatem peccans potest *sententialiter* jus dominii amittere sicut etiam quandoque *propter alias culpas*.” *Sum. Theol.*, II^a II^æ, XII, 2.

² *Op. cit.*, I^a II^æ, XCVI, 4.

³ *De Reg. Princip.*, I, 6.

⁴ *Ibid.*

⁵ Baumann, *Staatslehre des heil. Thomas von Aquino* (Leipzig, 1873), pp. 161 ff.; cf. *Revue Néo-Scholastique*, 1895, pp. 27 ff.; Crahay, *La Politique de Saint Thomas d'Aquin* (Louvain, 1896).

⁶ *Sum. Theol.*, I^a II^æ, CV, 1.

the purpose for which it is instituted, that decides the happiness and prosperity of the subjects.¹

Historical Position. An organic synthesis of the elements of thought contained in preceding systems is as real an advance in the development of philosophy as is the introduction of elements absolutely new. In the one as well as in the other respect, the philosophy of St. Thomas is to be pronounced an advance in philosophic thought.

St. Thomas synthesized the more or less fragmentary truths which, during the preceding centuries, the schoolmen had slowly gathered together, as well as the elements of thought which, during the early part of the century in which he lived, Scholasticism had derived from Greek and Arabian sources. He perfected the Scholastic method, and consecrated to the service of truth the dialectic which rationalists had abused and which mystics had denounced. He gave to the doctrine of moderate realism its final expression, and enunciated a theory of universals which united what is true in Platonism with what is true in nominalism. He was the first to formulate a complete system of Christian Aristotelianism, thus pressing into the service of orthodoxy the philosopher to whom Arabian and Jewish unbelievers had looked as their champion in the warfare which they waged on Christianity. He determined for all time the true relation between faith and reason, and, while avoiding the extremes of rationalism and mysticism, gave permanent form to the thought which had inspired every Christian philosopher since the days of Justin, the first of the great apologists. And all this he accomplished not so much by creating as by transforming and assimilating. With a comprehensiveness of purpose which, in these modern times, seems nothing short of stupendous, he laid broad and deep the foundations of his vast synthetic system, and with a force and directness less easily to

¹ *De Reg. Princip.*, I, 3. On St. Thomas' economic doctrines, cf. *Rev. Neo-Scol.*, 1896, pp. 67, 161, 286.

be attained in the rich confusion of modern thought, compelled every source of knowledge to yield him material for his work. He drew from the Scriptures, from the Fathers, from the philosophers of Greece and Rome, from his predecessors in the Christian schools, and from contemporary Arabian and Jewish philosophers. It detracts neither from the recognized importance of those who preceded St. Thomas, nor from his own just title to praise as an original thinker, to say that he perfected the work of his predecessors, and, from materials which they supplied, reconstructed the edifice of Christian philosophy.

What is new and wholly original in the work of St. Thomas is the spirit in which he addressed himself to his task — the sense of completeness which impelled him to leave nothing incomplete or imperfect except in so far as everything human must be incomplete and imperfect; the mind appreciative of the value of truth wheresoever truth is found, and the belief, stronger and more deep-rooted in him than in any other schoolman, that all truth and all knowledge, from whatever source it is derived, is capable of harmonious adjustment.

In point of detail, St. Thomas contributed to Scholastic philosophy the doctrines by which the Dominican tradition was distinguished from the Franciscan teaching, — the oneness of the substantial form in each individual, the doctrine of subsistent forms, the denial of the *rationes seminales* in the sense in which they were admitted by St. Bonaventure, and the affirmation of the real distinction between the soul and its faculties. It was on these points that, as we shall see, Thomists and anti-Thomists came to be divided.

It is only when, as we study the history of later Scholasticism and the history of the philosophy of modern times, we shall look back to the thirteenth century through the perspective of ages of less successful attempts at philosophical synthesis, that we shall begin to realize the true grandeur of the most commanding figure in the history of mediæval thought.

CHAPTER XXXIX

THOMISTS AND ANTI-THOMISTS

Sources. Besides the works of the philosophers to be mentioned under this head, we possess as valuable sources of information Denifle's *Chartularium Universitatis Parisiensis* and articles by Denifle, Ehrle, and others in the *Zeitschrift für Katholische Theologie* and in the *Archiv für Literatur und Kirchengeschichte des Mittelalters*.

While St. Thomas was teaching at the convent of St. James, several of his doctrines — especially that of the unity of the substantial form in man — aroused violent opposition among his confrères of the order of St. Dominic. Of these Dominican opponents of St. Thomas the most prominent were **Roland of Cremona**, **Richard Fitzacre**, and **Robert Kilwardby**. It was owing to the influence of Kilwardby, who was archbishop of Canterbury, that the masters of the university of Oxford carried their opposition to Thomism so far as to censure as dangerous the denial of the *rationes seminales* and the affirmation of the unity of the substantial form in man. This was in 1277. In the following year, however, all opposition on the part of the Dominicans ceased, and in a general chapter of the order, held at Milan in that year, those who had opposed the teaching of St. Thomas in England were censured.¹

The Franciscans, jealous for the reputation of the great teachers of their order, Alexander of Hales and St. Bonaventure, made common cause with those who objected to the doctrine of unity of substantial forms and to the denial of the *rationes seminales* — doctrines which, as we have seen, were part of the Franciscan tradition.

Foremost among St. Thomas' Franciscan adversaries were **William de la Mare**, author of the *Correptorium Fratris Thomæ*, **Richard of Middleton**, who was appointed to the Franciscan chair

¹ Cf. *Chartul.*, I, 566; II, 6.

at Paris in 1281, **John Peckham**, who, after teaching at Paris and at Oxford, succeeded Kilwardby in the see of Canterbury, and **Peter John Olivi** (1248–1298),¹ who later on unsettled the idea of discipline in his own order by his defense of literal poverty — a doctrine which brought about his condemnation in 1283.

Opposed to the doctrines introduced by St. Thomas were also the secular teachers, the chief of whom were **William of St. Amour**, **Gerard of Abbeville**, and **Henry of Ghent**. When, on March 7, 1277, Stephen Tempier, at the request of John XXI, assembled the masters of theology of the University of Paris to condemn the errors then prevalent in the schools, the secular masters united with the Franciscans and succeeded in placing on the list of condemned propositions several (for example, Nos. 81, 96, and 191) which were evidently meant to formulate the Thomistic doctrine of substantial forms and of individuation.² Thus did the secular teachers of the university achieve a disgraceful triumph in the momentary discredit thrown on him who had been the great champion of the mendicants in the controversy concerning university privilege.

But, while the opposition to Thomism was as short-lived as it was violent, the number and importance of the advocates and defenders of St. Thomas grew slowly but steadily as time went on. First among these were **Ulrich of Strasburg**, a disciple of Albert the Great, **Bernard of Hotun**, who was bishop of Dublin and died in 1298, **William Mackelfield**, who taught at Oxford, **Giles of Rome** (*Ægidius a Columna*, or *Ægidius Romanus*) of the order of Hermits of St. Augustine, surnamed *Doctor Fundatissimus* (1243–1316), **Peter of Auvergne**, who was probably a pupil of St. Thomas at Paris, and **Godfrey of Fontaines** (died 1304).

Petrus Hispanus (1226–1277), who in 1276 became pope, taking the name of John XXI, seems to have avoided the Thomistic controversy and confined his attention to the study of logical problems. His *Summulæ Logicales* became a text-book in the

¹ Petrus Johannis Olivi (genitive).

² Cf. Chartul., I, 543 ff.

schools, and was known as the *Logica Modernorum*, in contradistinction to the *Logica Vetus* and the *Logica Nova*. He is said to be the author of the mnemonic lines *Barbara Celarent*, etc.¹

Vincent of Beauvais (died 1264) helped to popularize the current philosophical doctrines of his time in his encyclopædic treatise entitled *Speculum Magnum*, in which he adhered to the teaching of Albert and St. Thomas. The work was intended to cover the whole field of education, as it was then understood. Three portions, *Speculum Historiale*, *Speculum Naturale*, and *Speculum Doctrinale*, were completed by Vincent:² the fourth, *Speculum Morale*, which is merely an extract from the writings of St. Thomas, was added by another hand.³

Hervé of Nedellec (*Hervæus Natalis*), who died in 1323, must be reckoned among the ablest of the first followers of St. Thomas. He is the author of many works on philosophy and theology, including, though this is by no means certain, the *Summa Totius Logicæ* found among the *opuscula* of St. Thomas.

Dante (1265–1321), whose *Divina Commedia* has been described as "Aquinas in verse," may also be counted among those who helped to give wide circulation to the philosophical doctrines of St. Thomas. The influence of St. Thomas and of the other great schoolmen was still preponderant in Paris when Dante studied at the university in that city, and his *De Monarchia* may be placed by the side of the treatise *De Regimine Principis* as a valuable contribution to the political science of the Middle Ages. Although the Divine Comedy was written at a time when Scholasticism had begun to decline, and is, therefore, as Ozanam so beautifully expresses it, the "swan song of Scholasticism," it

¹ Prantl, however (*Geschichte der Logik*, III, 15), quotes the lines from the logical treatises of William of Shirwood (or Shyrwode) (died 1249). This writer as well as Petrus Hispanus drew largely from Byzantine sources, especially from Psellus, who appears to have been the first to use mnemonic lines to designate the valid moods in the three Aristotelian figures (*cf.* Prantl, *op. cit.*, II, 276).

² *Cf.* Bourgeat, *Études sur Vincent de Beauvais* (Paris, 1856).

³ *Cf.* Figuier, *Vies des Savants*, etc., p. 231.

embodies the best doctrines of the Golden Age of Scholastic philosophy.¹

The subsequent history of the Thomistic school involves a study of the philosophical systems of Henry of Ghent and of Duns Scotus, who are the most important of the earlier opponents of Thomism, and who alone of all the Anti-Thomists left behind them a school of Anti-Thomistic tradition.

CHAPTER XL

HENRY OF GHENT

Life. Henry of Ghent, *Doctor Solennis*, was born at or near Ghent in the first or second decade of the thirteenth century. Very little is known about his early life. In 1267 he became canon of Tournai. Later on he taught with distinction at the University of Paris and took part in the discussion which arose in 1282 concerning the privileges of the mendicants in regard to hearing confessions. Between 1284 and 1293 he made several journeys from Paris to Tournai. He died in 1293, but whether at Paris or at Tournai is uncertain.

Sources. The most important of Henry's works are his *Summa Theologica* and his *Quodlibet*. The former was published at Ghent in 1520 and again at Ferrara in 1646; the latter was published at Paris in 1518, at Venice in 1608, and again at Venice in 1613. Monograph: De Wulf, *Études sur Henri de Gand*, Louvain, 1894, embodied in *l'Histoire de la philosophie scolastique dans les Pays-Bas*, etc., Louvain, 1895.

DOCTRINES

Henry's system of philosophy agrees, in its general outlines, with the philosophy of St. Thomas. There are, however, some points of difference:

1. **Relation of Philosophy to Theology.** While agreeing with St. Thomas that philosophy and theology are distinct sciences,

¹ Cf. Ozanam, *Dante and Catholic Philosophy of the Thirteenth Century*, translated by Lucia D. Pychowska (New York, 1897); also Moore, *Studies in Dante* (Oxford, First Series, 1891; Second Series, 1899).

and that each has its proper object, Henry insists that philosophy is not to be studied for its own sake, but as an aid to theology :

Non licet scientias philosophicas addiscere nisi in usum hujus scientiæ (theologiæ). Qui enim philosophicas scientias discunt, finem statuendo in ipsis propter scire naturas rerum . . . , isti sunt qui ambulant in vanitate sensus sui.¹

2. Principle of Individuation. The principle of individuation is not matter with its determined dimensions, as St. Thomas taught, but a negative property of the suppositum, or individual. Henry teaches that the remote cause of individuation is matter, inasmuch as matter is the basis of multiplicity, but that the proximate cause is something which is distinct from matter although it is not a positive reality :

Oportet eas (formas creaturarum) individuari ut habeant rationem suppositi. . . . Sed quid est in supposito præter formam quo habet esse hoc? . . . Dico aliquid præter materiam et præter agens quod est quasi dispositio suppositi in quantum suppositum est. . . . Sic ergo nonnisi *determinatione negationis* . . . fit et individuatio et suppositi constitutio.²

3. Distinction between Essence and Existence. Henry denies the real distinction between essence and existence, thus returning to the doctrine of Alexander of Hales and the first schoolmen of the thirteenth century. He maintains the thesis "Esse sunt diversa quorumcumque essentiæ sunt diversæ."³

4. Plurality of Substantial Forms. Henry maintains that besides the rational soul there is in man another substantial form, the *forma corporeitatis*, or *forma commixtionis corporalis*. His argument is as follows: "Aliter enim nihil omnino homo in generatione hominis generaret substantiale, sed tantummodo corrumperet."⁴ This form is the famous *mediator plasticus* of later Scholasticism.

5. Theory of Knowledge. Misunderstanding the Scholastic doctrine of ideation, Henry, while admitting, in the case of

¹ *Sum. Theol.*, Art. VII, Q. X.

² *Quodl.*, V, 8.

³ *Op. cit.*, I, 10.

⁴ *Op. cit.*, III, 16.

sense-knowledge, the existence of the *species sensibilis* as a *substitute* for the object, denies the existence of the intelligible species on the ground that the phantasm, by becoming spiritualized, determines the intellect to the act of knowledge :

In vi sensitiva apprehensiva requiritur species objecti. . . . In vi autem apprehensiva intellectus, nulla species requiritur de objecto, quia ipsum (objectum) existens in phantasmate, factum universale, præsens est et simul cum intellectu.¹

6. Augustinianism. In more than one point of doctrine Henry of Ghent returns to the Augustinian and Platonic tradition of the eleventh century. For example, he attaches great importance to intellectual memory, teaches that there is no real distinction between the soul and its faculties, and adds to the Augustinian doctrine of exemplarism the theory of a *special illumination* by which man attains a transcendent knowledge of the essences of things as they exist in the Divine Mind and of supernatural truth :

Naturali enim appetitu bene desiderat (homo) scire etiam illa quæ sunt supernaturaliter cognoscenda, quæ secundum communem illustrationem a divino exemplari sine illustratione specialiori non potest attingere.²

7. Superiority of Will to Intellect. Henry is the first of the mediæval voluntarists. He maintains the superiority of will with respect to intellect. Intellect, indeed, precedes will ; nevertheless, will is the more perfect faculty, intellect being merely its servant :

Omnino habitus et actus et objectum voluntatis præeminet actui, habitui et objecto intellectus : idcirco absolute dicendum quod voluntas præeminet intellectui et est altior potentia illo.³

Historical Position. Henry of Ghent contributed to Scholastic philosophy a very able refutation of scepticism. His renewal of the Augustinian tradition, which had been so important in

¹ *Quodl.*, XIII, 11.

² *Sum. Theol.*, Art. I, Q. II.

³ Quoted by Gonzalez, *op. cit.*, II, 317 ; cf. *Quodl.*, I, 14.

the schools of the centuries preceding the thirteenth, was in keeping with the teachings of the Franciscan masters, and helped to prepare the way for the era of greater Franciscan influence inaugurated by Duns Scotus.

CHAPTER XLI

JOHN DUNS SCOTUS

Life. John Duns Scotus, *Doctor Subtilis*, the most gifted opponent of Thomism, rises above the plane of mere controversialists and takes rank among the great schoolmen, if not among the greatest. He was born, according to some writers, in 1266; according to others, in 1274. Where he was born is also uncertain, the most common opinion being that England was his birthplace.¹ At an early age he entered the Franciscan order, and made his studies at Oxford, where the Anti-Thomistic party was for the time triumphant. From 1294 to 1304 he taught at Oxford. In 1304 he began to teach in Paris; in 1308 he was transferred to Cologne, where he died the same year.² Both at Oxford and at Paris Scotus enjoyed a reputation as a teacher which was unequaled by even the greatest of his predecessors.

Sources. The *Opus Oxoniense*, which together with other works was composed while Scotus was at Oxford, is a commentary on the *Books of Sentences*. The works, or rather the lecture notes, which he composed at Paris were collected by his disciples under the title *Reportata Parisiensia*, or *Opus Parisiense*. The complete works of Scotus were published by Luke Wadding, Lyons, 1639. This edition was reprinted by Vives, Paris, 1891. Monograph: Pluzanski, *La philosophie de Duns Scotus*, Paris, 1887.³

¹ Wadding, in a *Life* prefixed to the works of Duns Scotus, gives Ireland as the birthplace of the Subtle Doctor, and supports his contention by several arguments. He quotes the following epitaph (date unknown):

Scotia me genuit, Anglia me suscepit,
Gallia me docuit, Colonia me tenet.

² For the extraordinary stories circulated at a later time as to the manner of Scotus' death, cf. Wadding in the *Life* above referred to, pp. 13 ff. For dates, cf. *Chartul.*, II, p. 118, n.

³ Frassen's *Scotus Academicus* (Paris, 1672) and Fr. Hieron. de Montefortino's *Venerabilis Joannis Duns Scoti Summa Theologica* (Rome, 1723) are valuable aids to the study of Scotus' system. They are both being republished by the Franciscans of the convent of Sant' Antonio (Rome, 1900 ff.).

DOCTRINES

The philosophy of Duns Scotus is characterized by *criticism* and *subtlety*. Owing, perhaps, to his predilection for mathematical studies—a predilection which is said to be due to the influence of Roger Bacon—Scotus was too much inclined to reject as inconclusive the philosophical arguments of his predecessors. He attacked, without distinction of school, and, apparently, without the least respect for the prestige of a great name, the doctrines of Alexander of Hales, St. Bonaventure, Roger Bacon, Henry of Ghent, and, above all, St. Thomas. Such is the subtlety of his speculations that even the mind trained in Scholastic modes of thought has considerable difficulty in following his line of reasoning.¹

Philosophy and Theology. Scotus, while agreeing with St. Thomas that philosophy and theology are distinct sciences, insists on the inferiority of the former, maintaining that human reason is incapable of solving such problems as the immortality of the soul. Indeed, his doctrine on this point comes dangerously near to the Averroistic principle that what is true in theology may be false in philosophy.²

Divine Attributes. St. Thomas taught that there exists only a *distinctio rationis*, or logical distinction, between the divine nature and the divine attributes,—justice, power, etc. Scotus maintains that the distinction in question is not merely logical, neither is it real, but something which is partly real and partly logical—*distinctio formalis a parte rei*. This celebrated distinction, sometimes referred to as the *Scotistic distinction*, is not easy to understand. Its opponents contend that it implies a contradiction. It is more than logical, for it exists *a parte rei*, independently of the mind; and it is less than real, for it

¹ Cf. for instance, *Quodl.*, Q. VII.

² Cf. *In IV^{um} Sent.*, Dist. XLIII, Q. II (*Opus Oxoniense*, Venice, 1598, Vol. II, folio 136); also *Quodl.*, Q. VI, Q. II (*Opus Oxon.*, II, 22).

is a distinction not of things, but merely of *formalities*, which may exist in one and the same thing, as, for example, the distinction between animality and rationality in man.¹

According to Scotus, the essence of things, as well as their existence, depends, not on the divine intellect, but on the divine will.

Matter and Form. Scotus revives the doctrine of *universal matter*, which the first Franciscan teachers had borrowed from Avicemrol:

Ego autem ad positionem Avicembronis redeo; et primam partem, scil. quod in omnibus creatis per se subsistentibus tam corporalibus quam spiritualibus sit una materia, teneo.²

All created substances are, therefore, composed of matter and form. Scotus, with characteristic subtlety, distinguishes three kinds of *materia prima*:

Materia *primo-prima*, habens actum de se omnino indeterminatum respectu determinationis cujuslibet formæ; materia *secundo-prima*, quæ est subiectum generationis et corruptionis, quam mutant agentia creata, seu Angeli seu agentia corruptibilia; materia *tertio-prima*, quæ est materia cujuslibet artis et materia cujuslibet agentis naturalis particularis.³

The *substantial form* is not, as St. Thomas taught, essentially one. It determines the matter to a higher mode of being; but this determination gives rise to an indetermination, or potency, with respect to a higher form; thus, the generic form leads to the specific, and the specific to the individual, so that the more complete is the determination of matter the greater is the *plurification of forms* in matter.

Omnis forma sive plurificatio est de imperfecto et indeterminato ad perfectum et determinatum, de uno materiali ad plura formaliter distincta.⁴

¹ For explanation of the Scotistic distinction, cf. *In I^{um} Sent.*, Dist. VIII, Q. IV (*Opus Oxon.*, I, 170), and Dist. II, Q. VII (*Opus Oxon.*, I, 81).

² *De Rerum Princip.*, Q. VIII, Art. 4 (*Opera*, Vol. III, p. 52).

³ *Loc. cit.*, Art. 3 (*Opera, ibid.*, p. 5).

⁴ *Loc. cit.*, Art. 4; cf. also *Opera*, Vol. VIII, p. 649.

Doctrine of Universals. In the *Quæstiones Acutissimæ super Universalia Porphyrii*¹ Scotus develops a doctrine of *moderate realism*. In his metaphysical treatises he defends the plurality of substantial generic and specific forms (*formalitates*), which have an objective reality, and a kind of unity inferior to numerical unity. In this manner Scotus prepares the way for his followers, who built on his metaphysical doctrines a system of exaggerated realism.²

Essence and Existence. Between essence and existence there is, according to Scotus, a "distinctio formalis a parte rei."³

The Principle of Individuation is neither matter nor form nor quantity but an individual property added to these. This property was called by the Scotists the *thisness* (*hæcceitas*) of a thing.⁴ Scotus denies the Thomistic doctrine that there cannot be two angels of the same species: "Simpliciter possibile est plures angelos esse in eadem specie."⁵

Voluntarism. The philosophy of Scotus is voluntaristic in its entire spirit. Scotus explicitly teaches that the will is superior to the intellect. "Voluntas imperans intellectui est causa superior respectu actus ejus. Intellectus autem si est causa volitionis, est causa subserviens voluntati."⁶ St. Thomas taught that the intuitive contemplation of the Divine Essence in the beatific vision is the principal and indeed the essential element in man's final happiness: Scotus teaches that it is by the act of perfect love of God in the next life that final happiness is to be attained. In a similar spirit of voluntarism, Scotus holds that

¹ Pp. 4 ff.

² Cf. *In II^{um} Sent.*, Dist. III, Q. I (*Opera*, Vol. VI, p. 335), and *In I^{um} Sent.*, Dist. VII (*Opera*, Vol. V, p. 702).

³ Cf. *In III^{um} Sent.*, Dist. VI, Q. I. Sometimes, as *In II^{um} Sent.*, Dist. XVI, Q. I (*Opera*, ed. Wadding, Vol. VI, P. II, p. 763), Scotus speaks as if the distinction were *conceptual*, or, at most, *modal*.

⁴ Cf. *In II^{um} Sent.*, Dist. III, Q. VI (*Opera*, Vol. VI, p. 413). In the *Reportata Parisiensia* (*Opera*, ed. Wadding, Vol. XI, P. I, p. 329) the word *hæcceitas* is used to designate the positive entity which is the principle of individuation.

⁵ *In II^{um} Sent.*, Dist. III.

⁶ *In IV^{um} Sent.*, Dist. XLIX, Q. IV.

the natural law depends on the will of God and that actions are good because God has commanded them, while St. Thomas, true to the principles of intellectualism, taught that natural law depends on the mind of God, and that God commands certain actions because they are good. Scotus maintains that human reason alone cannot prove the omnipotence of God¹ and the immortality of the human soul: St. Thomas taught that these truths are demonstrable by reason.

There are many other points of contrast between the tenets of the Subtle Doctor and those of the Angel of the Schools. The antithesis between the two great teachers is not to be explained by the "wish on the part of Brother John to contradict whatever Brother Thomas had taught": it is an antithesis arising out of the difference in the mental temperaments of the two men, the difference between an intellectualist and a voluntarist.

Historical Position. Scotus is frequently described as the Kant of Scholastic philosophy. He certainly resembles Kant in his refusal to accept without criticism any theory, no matter how universally received or how strongly supported by the authority of great names. The resemblance is accentuated by the fact that both Scotus and Kant are voluntarists, both maintaining that will is superior to intellect, and that human reason cannot demonstrate the truths which most vitally affect the destiny of man. But, remarkable as the resemblance is, no less striking is the contrast between the two philosophers. Kant appeals to the moral consciousness to prove the truths which reason cannot demonstrate: Scotus, on the contrary, appeals to revelation. Scotus places the supernatural order of truth above all philosophical knowledge, and consequently his criticism is partial and relative to the natural order of truth, while Kant's is radical and absolute. For Kant there is no court of appeal superior to the moral consciousness; for Scotus the supreme tribunal before which all truth is judged is divine revelation.

¹ Cf. *Quodl.*, Q. VI.

Scotus inaugurates an age of talent rather than of genius. The influence of St. Bonaventure, Albert, and St. Thomas seems to have silenced for a while the contentions which distracted the earlier schoolmen.¹ But now that the great constructive thinkers have disappeared, the intellectual knight-errantry of Abelard's day once more comes into vogue, and minds incapable of constructive effort devote themselves to analysis and controversy. It is among these lesser lights that Scotus, subtle and penetrating as his mind was, must be classed. For, while he excelled even the greatest of the schoolmen in critical acumen, he was wanting in that synthetic power which St. Thomas possessed in so preëminent a degree, and which more than any other quality of mind stamps the writer or thinker as a *philosopher*.

THOMISTS AND SCOTISTS²

In Scotus the opponents of Thomism found a champion. From this time forth the Franciscan teachers follow the leadership of Duns Scotus, while the Dominicans range themselves behind St. Thomas. The principal *Scotists* were **Francis of Mayron** (died 1327), surnamed *Magister Acutus Abstractionum*, and **Antonio Andrea** (died 1320), surnamed *Doctor Dulciffuus*. During the fourteenth and fifteenth centuries there appeared also the following Scotists: **John of Basoles**, **John Dumbleton**, **Walter Burleigh** (*Doctor Planus et Perspicuus*), **Alexander of Alessandria**, **Lychetus of Brescia**, and **Nicholas De Orbellis**. The best known of the *Thomists* of this period are **Gerard of Bologna** (died 1317), **John of Naples** (died 1330), **Peter De Palude** (*Pierre de la Palu*) (died 1342), and **John Capreolus**³ (1380-1444), who was surnamed *Princeps Thomistarum*.

¹ For a description of the dialectical sophistry employed in the Parisian schools at the end of the twelfth century, cf. Alexander Neckam, *De Naturis Rerum*, ed. Brewer, pp. 302 ff.

² Cf. De Wulf, *Hist. de la phil. mée.*, pp. 364 ff.

³ The principal work of Capreolus, *Defensiones Theologie Divi Thoma*, has been republished quite recently (Tours, 1900-1902).

In the course of time the controversy between the rival schools absorbed the attention which should have been devoted to the development of Scholastic philosophy in relation to the scientific doctrines introduced at the opening of the modern era. This, as we shall see, is one of the reasons why Scholasticism failed to accommodate itself to the scientific movement.

CHAPTER XLII

AVERROISM IN THE SCHOOLS

When, in the first decades of the thirteenth century, the Greek text of Aristotle was introduced into the schools and the Christian philosophers began to compose commentaries on the Latin translations made from it, the followers of the Arabian commentators commenced to give a more decidedly Anti-Christian direction to their interpretation of Aristotle. In this way there sprang up two hostile schools of Aristotelianism, — the orthodox Aristotelianism of the schoolmen and the heterodox Aristotelianism of the Averroists. The unity of the active intellect, the immortality of the individual soul, the freedom of the will, and the question of fatalism were some of the points on which the schoolmen and the Averroists differed in their interpretation of *the philosopher*. But the most characteristic doctrine of the Averroists, a doctrine which involved the denial of the most vital principle of Scholasticism, was that *what is true in philosophy may be false in theology*, and *vice versa*.

Towards the end of the thirteenth century Averroism appeared in the University of Paris, and was made the subject of several ecclesiastical inquiries and condemnations. Its chief representatives were Siger of Brabant¹ (died 1282 or 1288), Boetius the Dacian, and Bernier of Nivelles.

¹ Cf. Baeumker, *Die Impossibilia des Siger von Brabant* (München, 1898); Mandonnet, *Siger de Brabant et l'Averroïsme latin au XIII^{me} Siècle* (Fribourg, Suisse, 1899); *Archiv f. Gesch. d. Phil.*, 1899, p. 74.

Among the opponents of Averroism are to be reckoned the great schoolmen, who, like Albert and St. Thomas, composed treatises for the express purpose of refuting the doctrines of the Averroists, and controversialists, like **Raymond Lully**, who undertook an extensive campaign against the errors of the Arabians.

RAYMOND LULLY

Life. Raymond Lully, *Doctor Illuminatus*, is in some respects one of the most remarkable figures in the history of mediæval philosophy. His whole life was dominated by the idea of converting the Moorish world to Christianity. This he hoped to accomplish by the preaching of the gospel, by the refutation of the errors of the Arabians, and by the scientific demonstration of the revealed truths of the Christian religion. He was an apostle, a controversialist, and a theosophist. He was also an inventor, having contrived, among other things, a logical machine by means of which he hoped to prove all truth.

Raymond was born at Majorca in 1234 or 1235. After spending some years at the court of Aragon, he entered the order of St. Francis¹ and devoted the remainder of his life to the conversion of the Moors. He was stoned by the Mussulmans at Tunis in 1315.

Sources. Raymond's works occupy eleven folio volumes in the Mainz edition (1721-1742). The most important of his treatises, *Ars Brevis*, *Duodecim Principia Philosophiæ*, and *Ars Magna*, were published at Strasburg in 1651.

DOCTRINES

Raymond's *theosophy* appears in the doctrine that all truths, including the mysteries of faith, are demonstrable by human reason. The doctrine, however, is not to be understood in the rationalistic sense: for Raymond maintains that reason, in order to attain the highest truths, must be aided by faith:

Et sicut voluntas non posset amare objectum primum sine charitate, sic intellectus non potest intelligere primum objectum sine fide.²

¹ A different account is given by Figuier, *op. cit.*, pp. 256 ff.

² *Ars Magna*, P. IX, C. 63; Strasburg edition, p. 455.

Qui bene scit cognoscere et intelligere res quæ consistunt in intellectu et sensibiles, optime potest intelligere et cognoscere si voluerit, quod sicut esset dissonum rationi quod tres Dii essent, sic esset dissonum quod tres personæ divinæ non essent.¹

The *logical machine* which Raymond invented seems to have been contrived and constructed on the principle that not only are ideas representations of realities but the combinations of ideas are representations of the truth existing in real things. The machine was made up of letters, which symbolized the elements of thought, and of different geometrical figures, such as circles, squares, triangles, etc., along which the letters could be moved so as to form different combinations, each resultant combination representing a conclusion and each process of movement representing a proof. It is possible that Raymond was led to the idea of constructing a logical machine by his study of the cabalistic philosophy of the Jews. He frequently expresses his great admiration for what he calls the *superabundans sapientia*, the mystic doctrine of Jewish philosophy :

Est igitur Kabbala habitus animæ rationalis ex recta ratione divinarum rerum cognitivus ; propter quod est de maximo etiam divino, consequutive divina scientia vocari debet.²

Historical Position. Raymond's contemporaries did not agree as to the value of his contributions to philosophy and theology. Some regarded him not only as orthodox in his teaching but as specially illumined from on high — *Doctor Illuminatus* : they commented on his works, and provided for the foundation of special chairs to perpetuate his doctrines in the universities of Barcelona and Valencia. Others, on the contrary, so vehemently denounced his teachings as heterodox that the inquisitor of Aragon was instructed to draw up a list of propositions from the writings of Raymond and forward it to Rome. It is uncertain whether the propositions were formally condemned : it is,

¹ *Liber Contemplationis*, I, Dist. V, Q. II.

² *De Auditu Kabbalistico*, Prol., Strasburg edition, p. 44.

however, generally admitted that, were it not for the savor of heterodoxy attaching to his doctrines, Raymond would have been canonized.

Retrospect. Before passing to the fourth period of Scholastic philosophy, let us look back at the period which we have just studied. It is the Golden Age of Scholasticism. During the thirteenth century Christian revelation and scientific knowledge were harmonized in the great synthetic systems of Christian philosophy; the dogmatic doctrines of the Patristic period were welded into a more consistent body of theological speculation; the whole range of human knowledge was surveyed, and whatever was found to be true was given its proper place in systems of constructive thought. It was an age of vast creative enterprises in the world of speculation. It was an age on which the Christian philosopher and the Christian historian who have begun to understand it love to dwell. They realize that it was not a dark age but an age of enlightened faith, which more than any other understood the paramount importance of the supernatural element in life, and which, while it gave to reason its legitimate rights, was more willing than any other age to give unto God the things that are God's. During the thirteenth century the Church triumphed in Italy in the temporary rule of her Visible Head: she triumphed throughout the Holy Roman Empire in the acknowledgment which emperors made of their dependence on the Holy See;¹ but it was in the Christian schools of Europe, and especially of France, that she achieved a still more honorable triumph, in the recognition of the true value of theological science and in the universal acknowledgment of the principle that there can exist no contradiction between the data of revelation and the truths which human reason discovers. Soon all this was to be changed; the struggles with the Empire, the exile to Avignon, and the western schism were to disrupt the external harmony in which sanctity and learning

¹ Cf. Lavissee et Rambaud, *Histoire générale, etc.*, II, 279-291, and III, 312.

had thriven, while the growing influence of the Averroists and the decay of Scholasticism were to bring about the final dissolution of Scholastic philosophy by establishing the maxim that what is true in philosophy may be false in theology.

The thirteenth century was an age of men rather than of schools: it was dominated by the personality of the great masters of Scholasticism. It was an age of great intellectual activity. There was not, as is sometimes asserted, merely one school, and that an uninvitingly orthodox one. The unanimity with which the greatest of the schoolmen advocated the fundamental principles of Scholasticism was compatible with a considerable degree of variety as to the details of method and doctrine. Roger Bacon and Albert the Great advocated the use of observation and experiment, and sought to introduce a reform in scientific method; St. Thomas refuted pantheism, innatism, and other errors, and gave a positive development to Aristotelian philosophy; St. Bonaventure formulated a system of Christian mysticism which was destined to become the inspiration of the orthodox mystics of later times; Henry of Ghent furnished arguments for the refutation of scepticism and developed the exemplarism of St. Augustine; and Scotus inaugurated an age of criticism and formulated a system of voluntarism which should have stimulated the later Scholastics to enlarge and strengthen the philosophical synthesis of Scholasticism in presence of the dangers which were soon to threaten it. Indeed, it is only the superficial student of the thirteenth century who can fail to recognize that it was a period of immense intellectual activity.

FOURTH PERIOD OF SCHOLASTICISM

*Birth of Ockam to taking of Constantinople (1300-1453)*¹

The causes of the decay of Scholastic philosophy were both internal and external. The internal causes are to be found in the condition of Scholastic philosophy at the beginning of the fourteenth century. The great work of Christian syncretism had been completed by the masters of the preceding period: revelation and science had been harmonized; contribution had been levied on the pagan philosophies of Greece and Arabia, and whatever truth these philosophies had possessed had been utilized to form the basis of a rational exposition of Christian revelation. The efforts of Roger Bacon and of Albert the Great to reform scientific method had failed: the sciences were not cultivated. There was therefore no source of development, and nothing was left for the later Scholastics except to dispute as to the meaning of principles, to comment on the text of this master or of that, and to subtilize to such an extent that Scholasticism soon became a synonym for captious quibbling. The great Thomistic principle that in philosophy the argument from authority is the weakest of all arguments was forgotten: Aristotle, St. Thomas, or Scotus became the criterion of truth, and as Solomon, whose youthful wisdom had astonished the world, profaned his old age by the worship of idols, the philosophy of the schools, in the days of its decadence, turned from the service of truth to prostrate itself before the shrine of a master.² Dialectic, which in the thirteenth century had been regarded as the instrument of knowledge, now became an object of study for the sake of display; and to this fault of method was added a fault of style — an uncouthness and barbarity of terminology which bewilder

¹ To the list of sources given, p. 240, add Prantl, *Geschichte der Logik* (4 Bde., Leipzig, 1855-1870). Consult especially Vol. III, pp. 319 ff., and Vol. IV.

² Cf. Ozanam, *Dante, etc.*, English trans., p. 94; *Revue Neo-Scol.*, Nov. 1903.

the modern reader. The religious orders, which had given to Scholasticism its ablest masters, now devoted all their attention to fomenting the Thomistic and Scotistic controversy, thus frittering away on matters of trifling importance the gifts which should have been devoted to the more serious task of meeting the difficulties that sprang up on every side as the modern era approached.

The external causes of the decay of Scholasticism were, in the first place, the political conditions of the time. The fourteenth century was a period of strife between the secular and the spiritual power, of rebellion of princes, bishops, and priests against the authority of the Holy See, and of contests between rival claimants for the chair of Peter. Religion seemed to lose its restraining power, and moral depravity, sorcery, and occult science corrupted that true sense of the superiority of things spiritual which characterized the thirteenth century. The universities, too, which had contributed so much to the success of Scholasticism and had received so much from it in return, now began to bring discredit on the Scholastic system. At Paris, the course of study for the degrees in theology was shortened, and academic honors were distributed with more freedom than discretion, mere youths (*impuberes et imberbes*) being, through favor, awarded the title of master. Add to this that everywhere throughout Europe institutions¹ inferior to the great universities were accorded the right to confer degrees which had hitherto been the monopoly of Paris and Oxford.

In the general relaxation of the spirit of serious study, there appeared a phase of Scholastic philosophy which may be said to have been inspired by the principle commonly known as "Ockam's razor": "*Entia non sunt multiplicanda sine necessitate.*" In a spirit of protest against the extreme formalism of the Scotists, who multiplied metaphysical entities to an alarming degree, the new philosophy aimed at simplicity. Soon, however,

¹ Cf. *Chartul.*, II, vii and 547.

it carried the process of simplification to the extent of discarding as useless all serious metaphysical and psychological speculation ; it substituted dialectic for metaphysics, advocated nominalism, and ended in something dangerously near to sensism and scepticism.

The chief representative of this phase of Scholasticism is **William of Ockam**. Before his time, however, the tendencies which resulted in his philosophy appeared in the doctrines of **Durandus** and **Aureolus**.

CHAPTER XLIII

PREDECESSORS OF OCKAM

DURANDUS

Life. Durandus of St. Pourçain, *Doctor Resolutissimus*, was born at St. Pourçain, in Auvergne, towards the end of the thirteenth century. He joined the order of St. Dominic, and was at first a most ardent defender of the doctrines of St. Thomas. About the year 1313 he taught theology at Paris. After spending some years in Rome as Master of the Sacred Palace during the reign of John XXII, he returned to France and occupied successively the sees of Limoges, Puy, and Meaux. He tells us himself that he was bishop of Puy.¹ The year 1332 is the most probable date of Durandus' death.

Sources. The most important of Durandus' works is entitled *Super Sententias Theologicas Petri Lombardi Commentariorum Libri Quatuor*. It was published in Paris in 1550. Trittenheim mentions several minor treatises. (*Cf. Præfatio* to above edition.)

DOCTRINES

By his independence of thought and his advocacy of certain principles which his contemporaries considered dangerous, Durandus earned the title of *Doctor Resolutissimus*. Still, he

¹ *Ecclesia Aniciensis cui præfui* (*In IV^{um} Sent.*, Dist. XXIV, Q. III) ; *cf. also Chartul.*, II, 218, note 11.

never exceeded the limits of orthodoxy. Indeed, the independence which he advocated, and which he formulated in the principle "Naturalis philosophia non est scire quid Aristoteles aut alii philosophi senserint, sed quid habeat veritas rerum," had been professed before his time and formulated almost in the same words by St. Thomas and the other great schoolmen. Such independence of thought was recognized as the birthright of every philosopher, and the fact that Durandus exercised this right without incurring ecclesiastical censure is the best refutation of the calumny that the Church refused to tolerate independent thinking as long as she could enforce obedience to her commands. Durandus manifested his independence :

1. **In rejecting the Sensible and Intelligible Species.** The reason which he adduces is *a priori* rather than empirical, and is based on a misconception of the Scholastic doctrine of *species*. In his *Commentary on the Books of Sentences*,¹ he first gives his opinion that the doctrine of species was introduced to explain sense-perception, and was transferred to the explanation of intellectual knowledge ; he then proceeds to criticise the doctrine of *sensible species* as follows :

Omne illud, per quod, tamquam per repræsentativum, potentia cognitiva fertur in alterum, est primo cognitum ; sed species coloris in oculo non est primo cognita seu visa ab eo, immo nullo modo est visa ab eo ; ergo per ipsam, tamquam per repræsentativum, non fertur in aliquid aliud.

Now this argument is simply irrelevant. The predecessors of Durandus, so far from teaching that the species is a *medium repræsentativum*, maintained, on the contrary, that it is merely a medium by which the object becomes present to the subject — what may be called a *medium præsentativum*, that is to say, a *medium communicationis*. It is owing to a similar misunderstanding that later nominalists and so many modern writers regard the Scholastic doctrine of species as untenable.

¹ Lib. II, Dist. III, Q. VI, Nos. 9 and 10.

2. **In rejecting the Active Intellect.** This follows as a natural consequence from the rejection of the species. Durandus teaches that there is no more need of an active intellect than of an active sense.¹ Here, again, he misunderstands the Scholastic doctrine. There is need of an active intellect, because, although the object of intellectual knowledge — the universal nature — exists in the world of sense-phenomena, it exists there clothed in material conditions, of which it must be divested before becoming actually intelligible, and the task of separating the universal from these material conditions is the work of the active intellect.

3. **In his Advocacy of Nominalism.** This follows from the rejection of the active intellect. Durandus teaches that the object of the intellect is the individual as it exists, and that the universal exists nowhere outside the mind.

Universale non est primum objectum intellectus, nec præexistit intellectioni, sed est aliquid formatum per operationem intelligendi . . . esse universale, esse genus vel speciem dicuntur entia rationis.²

Durandus, however, does not openly profess nominalism, that is, he does not teach expressly, as the followers of Ockam do, that the only universality is the universality of names.

4. **In his Doctrine of the Principle of Individuation.** Durandus teaches that the principle of individuation is not distinct from the specific nature of the individual, since everything is individuated by actual existence. "Non oportet præter naturam et principia naturæ quærere principia individui."³

5. **In his Rejection of Divine Coöperation with Secondary Causes.** This is the doctrine by which Durandus places himself in most pronounced opposition to the current teaching of his time. The Scholastics of the thirteenth century unanimously taught that God is not only creator and preserver of all finite things, but also coöperator in all the actions of secondary causes. Durandus

¹ Cf. *In I^{um} Sent.*, Dist. III, P. II, Q. V.

² *Op. cit.*, Lib. I, Dist. III et Dist. IX.

³ *Op. cit.*, Lib. II, Dist. III, Q. II.

maintains that all the actions of the creature proceed from God inasmuch as it is God Who gave creatures the power to act, but he denies that there is an immediate influxus of the Creator in the actions of the creature.

Non oportet quod Deus immediate coagat, sed solum mediate, conservando naturam et virtutem causæ secundæ.¹ Deus non est causa actionum liberi arbitrii, nisi quia liberum arbitrium ab Ipso est et conservatur.²

The theological doctrines of Durandus are still more at variance with current teaching, and on some points his dogmatic opinions cannot without difficulty be reconciled with Catholic belief.

Historical Position. If Duns Scotus is the Kant, Durandus is the Locke of Scholastic philosophy. His treatment of the most serious problems of psychology and metaphysics is marked by superficiality. He seemingly took no pains to make himself acquainted with the doctrines which he criticised, and his own solution of many a problem stops short of the point where the real problem begins. Simplicity, even at the expense of thoroughness, appears to have been his motto.

AUREOLUS

Life. Peter d'Auriol (*Aureolus*), *Doctor Facundus*, was born about the end of the thirteenth century at Toulouse.³ In 1318 he became master of theology at the University of Paris. In the following year he was made provincial of the Franciscans in Aquitaine. In 1321 he was promoted to the metropolitan see of Aix.⁴ He died in 1322.

Sources. The works of Aureolus, *Quodlibeta* and *Commentaria in Libros Sententiarum*, were published at Rome (1596-1605) in four folio volumes.

DOCTRINES

Aureolus was at first a Scotist. Later, however, actuated apparently by the idea which inspired Durandus to *simplify* Scholasticism, he arrived at conclusions which are practically

¹ *Op. cit.*, Lib. II, Dist. I, Q. V.

² *Ibid.*, Dist. XXXVII, Q. I.

³ Verberie (Vermerie)-sur-Oise is usually given as the place of his birth.

⁴ *Cf. Chartul.*, II, 225.

identical with those of the Doctor Most Resolute. He denied the reality of universals, the existence of *species* and of the active intellect, the distinction between essence and existence, and the distinction between the soul and its faculties. Referring to the doctrine of *species*, he says :

Unde patet quomodo res ipsæ conspiciuntur in mente, et illud quod intuemur non est forma alia specularis sed ipsamet res habens esse apparens, et hoc est mentis conceptus, sive notitia objectiva.¹

The expression *forma specularis*, and the word *idolum* which occurs in the same article, both being used to designate the *species*, show that Aureolus was as far as Durandus was from understanding the rôle which the great schoolmen assigned to the *species*.

Historical Position. The doctrines of Aureolus as well as those of Durandus prepared the way for the outspoken conceptualism of Ockam

CHAPTER XLIV

WILLIAM OF OCKAM

Life. William of Ockam, *Venerabilis Inceptor, Doctor Invincibilis*, is by far the most important philosopher of this period. He was born at Ockam, in Surrey, about the year 1280. It is said that he studied at Merton College, Oxford, where it is possible he had Duns Scotus for teacher.² There seems to be some doubt as to his having followed the lectures of Scotus at Paris. He taught at Paris between the years 1320 and 1323. After quitting his chair at Paris, he threw in his lot with the opponents of the temporal power of the popes, was imprisoned at Avignon, escaped in 1328, and sought refuge at the court of Louis of Bavaria, to whom he made the well-known promise : " Tu me defendas gladio, ego te defendam calamo." It is not known with certainty where and when he died, but it is probable that he died at Munich in 1349.

Sources. Ockam's principal philosophical works are *Super Quatuor Libros Sententiarum*, *Quodlibeta*, *Tractatus Logices*, and Commentaries on

¹ In *II^{um} Sent.*, Dist. XII, Q. I, Art. 2.

² Cf. *Chartul.*, II, 590.

Aristotle. In addition he wrote several controversial works in support of the claims of the State against the Church. His *Commentary on the Books of Sentences* was published by Trechsel, at Lyons, in 1495. For bibliography and list of Ockam's controversial writings, cf. Potthast, *Wegweiser*, p. 871.

DOCTRINES

Nominalism. Ockam is best known by his renewal of nominalism. It would, however, be more correct to describe his doctrine of universals as a modified conceptualism. In his *Commentary on the Books of Sentences*¹ he enumerates three different opinions concerning universals, and then continues:

Quarta posset esse opinio quod nihil est universale ex natura sua sed tantum ex institutione, illo modo quo vox est universalis. Sed hæc opinio videtur non vera.

In the *Tractatus Logices*² he formulates his own doctrine that the universal is an *intention* of the mind:

Nullum universale est substantia quomodocumque consideretur, sed quodlibet universale est intentio animæ quæ secundum unam opinionem probabilem ab actu intelligendi non distinguitur.

Nevertheless, it is true that Ockam is, in a certain sense, a nominalist. He maintains, for example, that *propositions*, not *things*, are the objects of scientific knowledge:

Scientia quælibet, sive sit realis sive rationalis, est tantum de propositionibus tamquam de illis quæ sciuntur, quod solæ propositiones sciuntur.³

Ockam, therefore, is a conceptualist who uses the language of nominalism: he does not subscribe to the doctrine that the name (*vox*) is alone universal, but, distinguishing between the *vox scripta et prolata* and the *vox concepta*, or the term as it exists in the mind (*intentio animæ*), he declares that the latter alone possesses universality. He is a *terminist rather than a nominalist*. Ockam, it should be said, devoted special attention

¹ Lib. I, Dist. II, Q. VII, E.

² Pars I^a, Cap. 15.

³ In *I^{um} Sent.*, Dist. II, Q. IV, O.

to the development of the logical doctrine of *supposition* as formulated in the *Summulæ* of Petrus Hispanus. He would distinguish, therefore, between the *meaning of the word* and the *supposition of the term*, and would attribute universality to the supposition as well as to the meaning.

But, although Ockam did not profess the cruder form of nominalism, he may justly be considered the forerunner of the nominalists who appeared at the close of the fourth period of the history of Scholasticism.

Psychology. Since the only reality is the individual, the individual is the only object of knowledge. There is, therefore, no need of an intermediary *species*: knowledge takes place by immediate contact of subject with object: it is *intuitive*. There is, indeed, a kind of knowledge which Ockam calls *abstractive*; this, he maintains, has nothing to do with really existing things.¹ All knowledge of reality is *intuitive*.

It follows that the active intellect is as useless as are the *species*. Ockam, however, preserves the terms *active intellect* and *passive intellect* to designate the active and passive phases of the activity of the mind:

Intellectus agens et intellectus possibilis sunt omnino idem re et ratione. Ideo dico quod non est ponenda pluralitas sine necessitate.²

The principle here enunciated is known as the *Law of Parsimony*, or more commonly as "Ockam's razor."

Ockam distinguishes between the rational soul and the sensitive form in man. The latter is extended and is corruptible:

Præter animam intellectivam est ponere aliam formam, scil. sensitivam, super quam potest agens naturale corrumpendo et producendo: et ideo non sequitur quod hæc esset incorruptibilis.³

It is this sensitive soul which is united immediately with the body. With regard to the rational soul, neither reason nor experience can prove that the principle of understanding is the

¹ *Quodl.*, V, 5.

² *In II^{um} Sent.*, Q. XXIV, Q.

³ *Op. cit.*, Q. XXII, H.

substantial form of the human body. It follows that *reason cannot demonstrate the immortality of the individual soul*: Aristotle's authority cannot be invoked because he speaks hesitatingly: we are obliged, therefore, to accept these truths as matters of faith.¹ This leads to the next point, —

Ockam's Scepticism. Ockam does not deny the possibility of arriving at certitude. The sceptical tendency in his philosophy manifests itself in the attempt to restrict the power of human reason. We have just seen that he relegates the immortality of the soul to the sphere of faith. In the list of *truths which human reason cannot prove* he includes the existence, unity, and infinity of God, and the immediate creation of the universe by God.² The same peculiar form of scepticism appears in

His Ethical Doctrines. Ockam, following Scotus, maintains that *right and wrong depend on the will of God*, and thus endangers the necessity and immutability of the principles of morality. "Eo ipso quod voluntas divina hoc vult, ratio recta dictat quod est volendum."³

Historical Position. The principles which Ockam formulated led to materialistic scepticism. Ockam was, however, saved from the explicit advocacy of materialism by his belief in the supernatural order of truth. If we exclude the element of faith and take his philosophy as it stands, we must pronounce him to be the forerunner of the anti-Christian philosophers of the Renaissance. He has been described as the *first Protestant*. And, indeed, he defended in his controversial writings the principles subsequently invoked by the first reformers to justify the encroachments of the secular power. In philosophy, too, his whole attitude is one of protest against the prevailing realism, and against the belief that the study of philosophy can be of material aid to theological sciences. In an age when theism

¹ *Quodl.*, I, 10.

² *Op. cit.*, II, 1, and *In I^{um} Sent.*, Dist. III, Q. II, F.

³ *In I^{um} Sent.*, Dist. XLI, L.

and spiritualism were universally taught as philosophical tenets, he protested, in the name of human reason, that belief in God and in the spirituality of the human soul has no foundation except in revelation.

CHAPTER XLV

FOLLOWERS AND OPPONENTS OF OCKAM

Ockam's conceptualism and his attempt to simplify Scholastic psychology and metaphysics constituted a reaction against a movement which was a source of real danger to Scholasticism — the ultra-realism of the Scotists. And because Ockamism, as it was called, responded to a need of the hour, it was accepted on every side, and met with extraordinary success. Its triumph, however, was short-lived. Men soon realized that the danger which Ockamism introduced was greater than the evil which it sought to remedy. Within the period of seven years (1339–1346) three official condemnations¹ were launched against it, the first two emanating from the University of Paris and the third from Pope Clement VI. During the fifteenth century similar decrees were issued, showing that the struggle between the Ockamists and their opponents continued until the close of the Scholastic era.

Among the first followers of Ockam were **Robert Holkot** or **Holcot** (died 1349), **Gregory of Rimini** (died 1358), and **John Buridan** (died about 1360). Of these the most distinguished was John Buridan. He was born at Béthune, towards the end of the thirteenth century. Between the years 1320 and 1323 he followed the lectures of Ockam at the University of Paris. In 1328 he became rector of the university, and for a quarter of a century occupied the first place among the advocates of Ockamism, which system he continued to defend in spite of

¹ Cf. *Chartul.*, II, 485, 506; Prantl, *Gesch. der Logik*, IV, 1 ff.

prohibition and condemnation. No importance is to be attached to the story that he was driven from the university and sought refuge in Vienna. Buridan developed the nominalistic theory of universals and formulated a theory of will, in which he maintained that *choice is invariably determined by the greater good*, and that the only freedom which we possess is a power of suspending our choice and reconsidering the motives for action. The well-known comparison which gave rise to the expression "Buridan's ass" is not found in the works of Buridan, although it is possible that he made use of such an illustration in his lectures.

During the latter half of the fourteenth century **Marsilius of Inghen** and **Peter d'Ailly** were the principal defenders of the doctrines of Ockam. The former,¹ after having achieved remarkable success as a teacher at Paris, served a term as rector of the university. About the year 1379 he left Paris, went to Heidelberg, and was made rector of the university which had been founded in that city in 1356. Peter d'Ailly, surnamed "the Eagle of France," was born at Compiègne in 1350. In 1380 he became master in the University of Paris; later he was promoted successively to the sees of Puy and of Cambrai. He was made cardinal in 1411, and died in 1425. With these Ockamists is associated **Albert of Saxony**, who died in 1390.

In the fifteenth century **Gabriel Biel** (1430-1495) composed a *Collectorium in Libros Sententiarum*, which is an exposition and defense of Ockam's doctrines.

Among the opponents of Ockam's philosophy were many of the Scotists already mentioned.² To these may be added the realists, **Thomas of Strasburg** (died 1357) and **Dominic of Flanders** (died 1500), and the theosophist, **Raymond of Sabunde**.

¹ Stöckl (*Gesch. der Phil. des Mittelalters*, II, 1049 ff.) places Marsilius among the realists who were opposed to Ockam's philosophy. Cf. also De Wulf, *Hist. de la phil. scol. dans les Pays-Bas* (Louvain, 1895), p. 291. It is certain that in logic Marsilius was a nominalist; cf. *Archiv f. Gesch. der Phil.*, X, 249, n.

² Cf. p. 392.

Raymond of Sabunde, a Spanish physician, was professor of philosophy and medicine at Toulouse about the middle of the fourteenth century. His principal work, entitled *Theologia Naturalis*, is similar in method and contents to the *Ars Magna* of Lully. Raymond explains the *union of philosophy with theology* as consisting in the ability of each science to establish all truth, whether natural or supernatural. Whatever is contained in the book of nature is contained in the book of sacred scripture, and whatever is contained in the book of sacred scripture is contained in the book of nature. There is, however, this difference between the two books, that what is contained in the book of nature is contained "per modum probationis," while what is contained in the book of sacred scripture is contained "per modum præcepti et per modum mandati."¹ In this way Raymond breaks down the distinction which the schoolmen of the preceding age placed between the natural and the supernatural orders of truth—a distinction which is as essential to the true doctrine of Scholasticism as is the absence of contradiction between the two orders.

The general tendency of Raymond's thought was towards realism rather than towards nominalism or conceptualism. There is also traceable in his writings a leaning towards the mystic school of philosophy, and although he does not formulate the principle "*Amo ut intelligam*," he evidently attaches very great importance to the contemplative love of God as a factor in man's spiritual life:

Amor complet omnia, quia primo per amorem omnes creaturas ordinavit Deus ad hominem, deinde homo per amorem conjungitur et colligatur Deo. . . . Solus amor facit hominem bonum vel malum. . . . Virtus non est aliud quam amor bonus, et vitium non est aliud nisi amor malus.²

While Raymond was teaching theosophical mysticism in France and Spain, another and very different form of mysticism was being developed in the schools of the Low Countries.

¹ *Theologia Naturalis*, Titulus, 212, p. 314 of edition of 1852.

² *Op. cit.*, Tit. 119, 129; cf. *Raemundi Sebundii De Natura Hominis Dialogi, seu Viola Animi* (Lyons, 1544).

CHAPTER XLVI

THE MYSTIC SCHOOL

The revival of the principles of mysticism was a natural result of the decadent condition of philosophy during the fourteenth and fifteenth centuries. The heaping of subtlety on subtlety and the interminable controversies of the advocates of Thomism and Scotism bewildered and disgusted the serious seeker after spiritual light and drove him eventually to abandon all intellectual philosophy in favor of a life of contemplation and prayer. Many believed with the author of the *Imitation of Christ* that it is better to feel contrition than to know its definition, and that he is very learned indeed who does the will of God and renounces his own will. However, the condemnation of philosophy by the mystics reacted on the mystics themselves. Being unwilling to enter into the disputes of the schools, and obeying to the letter their resolve to abstain from philosophical speculation, they were unable to detect error when it was introduced into their own school. They judged all philosophy by the decadent systems which then flourished, and in their depreciation of purely rational speculation they overlooked the fact that without the safeguard of systematic dogma mysticism is unable to resist the inroads of pantheism and other errors. Thus it happened that the first mystics, who drew from the pure Christian sources, were soon followed by others, who drew from sources tainted with the pantheism of the Averroists. We must distinguish, therefore, the *orthodox mystics* and the *heterodox mystics*.

Orthodox Mystics. John Ruysbroek (1293-1381) may be regarded as the founder of the orthodox mysticism of this period. After having been chaplain at St. Gudule, in Brussels, he retired to the convent of the Augustinians at Groenendael, where he gave himself to the study and practice of asceticism. Through Gerhard Groot (1340-1384), the founder of the Brothers

of the Common Life, the influence of Ruysbroek reached the members of the community at Deventer, among whom was **Thomas Hemerken** or **à Kempis** (1380–1471),¹ the author of the *Imitation of Christ*.

GERSON

Life. The most influential of the orthodox mystics of the fourteenth and fifteenth centuries was John Gerson, *Doctor Christianissimus*. He was born at Gerson, in the diocese of Rheims, about the year 1364. After having studied under Peter d'Ailly in the Faculty of Arts at Paris, he entered the department of theology, and in 1395 became chancellor of the university. In 1397 he went to Bruges, where he made the acquaintance of the Flemish exponents of mysticism. In 1401 he returned to Paris, but about the year 1419 was obliged to retire from the university for having advocated the cause of the opponents of papal authority. He entered the monastery of the Celestines at Lyons, and there devoted himself to prayer and study. He died in the year 1429. His works, which were published in 1483, include *De Theologia Mystica Speculativa*, *De Theologia Mystica Practica*, *De Elucidatione Scholastica Mysticae Theologiae*, and many other treatises on philosophy, theology, and canon law.

DOCTRINES

Gerson was opposed equally to the *formalism* of the Scotists and to the *terminism* of the Ockamists. Indeed, he was opposed to all philosophy except in so far as philosophy is seasoned with piety. In a sermon, *De Omnibus Sanctis*, he condemns those self-dubbed philosophers who separate philosophy from the practice of religion, “qui se dici philosophos volunt, et non sunt, quoniam dum a religione secernere putant philosophiam, utramque perdunt.”² In the treatise *De Mystica Theologia Speculativa* he

¹ Fifteenth century writers, including Thomas himself (*cf. Opera*, ed. 1576, Vol. I, pp. 453 ff.), refer to the order as *Canonici Regulares Sancti Augustini, vulgo dicti Fratres*. It was Florentius, successor of Gerhard Groot, who founded the community at Agnetenberg, near Zwolle, where Thomas spent the greater part of his life. A recent work on Thomas à Kempis is Scully's *Life of Venerable Thomas à Kempis* (London, 1901).

² *Opera* (The Hague edition, 1718), Vol. III, col. 1517.

describes contemplative ecstasy after the manner and almost in the words of his favorite author, St. Bonaventure: "Est igitur extasis raptus mentis cum cessatione omnium operationum in inferioribus potentiis." ¹

DENIS THE CARTHUSIAN

Life. Denis the Carthusian,² *Doctor Ecstaticus*, was born at Ryckel, in the Belgian province of Limbourg, in 1402. After having obtained the degree of Master of Arts at Cologne, he entered the Carthusian monastery at Roermonde. He died in 1471. A complete edition of the works of the Carthusian is being published by the monks of Notre Dame des Prés. The eighteenth volume appeared in 1899.

DOCTRINES

Denis carefully avoids entering into the subtleties of the controversies which were agitating the schools in his day. "Imperitinentes subtilitates vitare propono."³ In the main his system of philosophy and theology is Thomistic. He considers, however, all speculative knowledge to be merely an introduction to the interior life of contemplation and ecstasy. In the mystic elements of his system he draws largely from the Pseudo-Dionysius.

Heterodox Mystics. The Averroism which prevailed during the fourteenth and fifteenth centuries, whether openly professed as it was by John of Gand (or John of Jandun, erroneously called John of Ghent), or taught more covertly as it was in different forms by John De Mirecourt and Guido⁴ of Medonta, took the form of an anti-Scholastic movement tending towards a revival of the pantheism of the twelfth century. A similar tendency towards pantheism led some of the mystics of this

¹ *Op. cit.*, Vol. III, col. 391.

² Cf. De Wulf, *Hist. de la phil. mtd.*, p. 370; also Mougél, *Dionysius der Karthäuser* (Mulheim, 1898), and *American Ecclesiastical Review*, November, 1899.

³ *Commentarius in Psalmos, Proem.*

⁴ Ægidius de Medonta; cf. *Chartul.*, III, 23.

time to maintain the identity of the creature with the Creator in the act of contemplative ecstasy—a doctrine which was repudiated by orthodox mystics. Some of the first heterodox mystics, such as Eckhart, show little or no trace of Averroistic influence; it was on the societies or brotherhoods of mystics that the Averroists brought their pantheistic doctrines to bear, thus widening the gulf between true and false mysticism.

ECKHART

Master Eckhart¹ (or Eckhardt) was born about the year 1260. He studied first at Cologne, and afterwards at Paris. He belonged to the order of St. Dominic. In 1326 the archbishop of Cologne instituted proceedings against Eckhart, who was then teaching in the convent of his order at Cologne. Eckhart repelled the charge of heresy, and in 1327 appealed to the Holy See. He died in 1327. In 1329 twenty-eight propositions taken from his writings were condemned by John XXII.²

DOCTRINES

In his Latin work entitled *Opus Tripartitum*, and in his sermons, written in German, Eckhart advocated a system of mysticism in which he maintained the disappearance of all distinction between the Creator and the creature in the act of contemplation. He taught that the supreme happiness of man consists in a *deification* by which man becomes one with God.³

Henry Suso (died 1366) and John Tauler (1290–1361), who were influenced by Eckhart's mystic doctrines, prepared the way for the Protestant mysticism of Sebastian Franck (1500–1545), Valentine Weigel (1533–1588), and Jakob Böhme (1575–1624), which, together with the cabalistic mysticism of John Reuchlin (1455–1522), flourished in the Renaissance period.

¹ Cf. Denifle, in *Archiv f. Literatur u. Kirchengesch. d. Mittelalters*, 1886; Jundt, *Hist. du panthéisme au Moyen Age*, pp. 231 ff.; and Denzinger, *Enchiridion*, Ed. VII, propp. 428–455.

² *Chartul.*, II, 322.

³ Cf. Denzinger, *op. cit.*, prop. 437.

CHAPTER XLVII

NICHOLAS OF AUTRECOURT

Life. Nicholas of Autrecourt¹ illustrates by his career as well as by his doctrines the deplorable condition into which Ockamism and Averroism had plunged philosophical speculation about the middle of the fourteenth century. In 1340, while Nicholas was still a mere bachelor in theology at the University of Paris, he was cited, together with six other students of theology, to appear before Benedict XII to answer to the charge of disseminating erroneous doctrines.² Six years later he was condemned, and in 1347 he renounced his errors.

DOCTRINES

Hauréau and the editors of the *Chartularium*³ publish a document in which is preserved a sample of the sophistical reasoning employed by Nicholas. The only principle which is immediately evident is the *principle of contradiction*. To this principle, therefore, every proposition must be reduced, in order that its truth may be demonstrated. Now, it is evident that an identical proposition, such as $A = A$, is the only proposition to which the principle of contradiction can be applied. It follows that identical propositions are the only propositions that can be proved to be true. The law of causality, the existence of the external world, the existence of the faculties of the soul cannot be demonstrated, because they cannot be reduced to the principle of contradiction.

Not content with these conclusions, which are virtually a profession of phenomenalism, Nicholas of Autrecourt goes so far as to call into question the principle of contradiction itself, thus ending in absolute scepticism :

Deus est, Deus non est, penitus idem significant, licet alio modo. . . . Item dixi, in quadam disputatione, quod contradictoria ad invicem idem significant.⁴

¹ Cf. De Wulf, *op. cit.*, p. 377.

² *Chartul.*, II, 505.

³ Cf. *op. cit.*, II, 576 ff.

⁴ *Op. cit.*, II, 578, 580.

He denies the existence of substantial changes, explaining that such changes take place by means of *combinations of atoms* (*congregatio corporum athomaliū naturalium*).

In his theological doctrines Nicholas advocates the *theological determinism* (denial of free will on the part of God) which was formulated by **Thomas Bradwardine** in his celebrated treatise *De Causa Dei contra Pelagium* (1344).

Historical Position. The doctrine of theological determinism shows the influence of the ultra-realism of the Averroists, while the sophistical method employed by Nicholas of Autrecourt betrays the influence of the method, if not of the doctrines, of Ockam. These two factors, Averroism and Ockamism, brought about the degeneration of Scholasticism even before the dawn of the modern era and the appearance of the forces which caused the complete disintegration of the Scholastic system.

Retrospect. It is not necessary to point out the signs of decay and dissolution which mark the fourth period in the history of Scholasticism. The effort to simplify Scholastic philosophy was, no doubt, intended as a reform; it aimed at correcting an evil which really existed; the process, however, of pruning the superabundant growth of philosophy was carried to the extent of cutting out the very core of Scholasticism;¹ Durandus, Aureolus, and Ockam, by setting aside as useless the most essential elements of Scholastic philosophy, did more harm to Scholasticism than even the Averroists had done. For it was Ockam and his followers who, by neglecting the serious study of the great masters of the school, contributed to bring about that profound ignorance of the real doctrines of Scholasticism which, at the opening of the new era, rendered impossible the alliance of the schoolmen with the advocates of the new science. The

¹ As a certain John Letourneur (*Joannes Versor*, died 1480) quaintly says: "Quasi abusus rei tolli non posset nisi ipsa res e medio removeretur, quasi infantem abluere mater nequiret nisi eundem in flumen prorsus abjiceret," *apud* Hauréau, *op. cit.*, II, 2, 491.

Averroists wrought irreparable injury to Scholasticism both directly and indirectly: directly, by their doctrines of determinism and of the unity of the active intellect, as well as by their principle that what is true in theology may be false in philosophy; indirectly, by their peculiar method, which was known as *ipsedixitism*. The Averroists outdid the Thomists and Scotists in their reverence for the word of the master; they gloried in the title of "Aristotle's monkey," or "Averroës' monkey," and when the Renaissance came, and the antagonism between science and philosophy arose out of the misunderstandings of the philosophers and the scientists, the greatest source of misunderstanding was the failure of the scientists to distinguish between the method of the earlier schoolmen and that of the degenerate Scholastics, who had fallen into the ways of the Averroists, and had begun to test all truth by an appeal to the authority of a master.

Before we turn to the study of the modern era it is necessary to give here a general idea of the character of Scholastic philosophy.

Character of Scholastic Philosophy. Scholastic philosophy had its origin, as we have seen, in the foundation of the Carolingian schools, an event which was the beginning of an intellectual renaissance of Europe in no way inferior in importance to the humanistic renaissance of the fifteenth century. The philosophy of the schools resulted from the attempt to dispel the intellectual darkness of the age of barbarian rule, and throughout the course of its development it bore the mark of its origin. The schoolmen were the defenders of the rights of reason; and if mysticism retarded, and rationalism compromised, the Scholastic movement, the success of mysticism and rationalism was merely temporary. Abelard and Gilbert de la Porrée were succeeded by Alexander of Hales, Albert the Great, and St. Thomas of Aquin, who, while they avoided the errors into which their predecessors had fallen, adopted the idea of method for which

their predecessors had contended, and succeeded in winning over even the most unyielding of the orthodox to a recognition of the just claims of human reason. The attitude of the great schoolmen towards the rights of reason appears most strikingly in the Scholastic use of dialectic as a means of arriving at a knowledge of natural truth and of obtaining a scientific, albeit an imperfect, grasp of the meaning of the mysteries of faith.

The use of dialectic by the schoolmen was determined by the conditions in which Scholasticism developed. Until the end of the twelfth century the schoolmen's knowledge of Greek philosophy was virtually limited to an acquaintance with Aristotle's logical treatises. When, however, Aristotle's metaphysical and psychological works were introduced into Christian Europe, the schoolmen began to construct a system of speculation based on Aristotelian metaphysics and psychology. The problem of universals, which the preceding centuries had discussed from the dialectician's point of view, was now successfully solved by the application of the principles of Aristotle's psychology. The notions of *substance*, *person*, *nature*, *accident*, *mode*, *potency*, and *act* were developed by the aid of Aristotle's metaphysical doctrines, and a theory of knowledge was formulated from his principles of epistemology. Still, the adoption of Aristotelianism as the basis of a system of speculative thought, and the application of Aristotelianism to a rational exposition of Christian dogma, must not be taken as the essential trait of Scholasticism. For Scholastic philosophy was eclectic in the truest sense of the word. While preserving a correct idea of systematic cohesiveness, it admitted elements of truth from whatever source they were derived, whether from Aristotle or from Plato, from the Stoics or from the Epicureans, from the writers of the Patristic age or from the Greek and Arabian commentators.

The trait which, even more than the use of dialectic or the adoption of Aristotelianism, characterized the philosophy of the schools, is the effort on the part of the schoolmen to unify

philosophy and theology, to discover and demonstrate the harmony of natural truth with truth of the supernatural order. This is the thought which inspired the first speculative attempts of the schoolmen, and which, after having manifested itself in so widely different forms in the philosophy of Erigena, of Abelard, and of St. Anselm, was finally crystallized in the principles in which St. Thomas enunciated his definition of the relations between reason and faith. The day has long gone by when a historian could, without fear of contradiction and protest, represent Scholastic philosophy as the subjugation of reason to authority. It is now universally conceded that the phrase *ancilla theologiæ* implied no servility on the part of philosophy, but rather the honorable service of carrying the torch by which the path of theology is lighted. Hauréau¹ declares that one has but to look at the vast number of volumes which the schoolmen wrote to realize how much value they attached to philosophy and how inexorably they felt the need of exercising their reason. Indeed, it is only the most superficial student of history who fails to recognize in the Middle Ages a period of immense intellectual activity, and the more the philosophy of that period is studied the deeper becomes the conviction that the schoolmen were far from failing to recognize the rights of human reason. If, then, Scholastic philosophy effected the most perfect conciliation of reason with faith, we must not take it for granted that the conciliation was brought about at the cost of the independence of philosophy. The schoolmen were as far removed from fideism as they were from rationalism. They attached independent value to philosophy as well as to theology, while they contended that philosophy and theology can never contradict each other. In this way — and herein lies the philosophical significance of Scholastic philosophy — the schoolmen established between the natural and the supernatural the relation which the Greeks had established between matter and spirit, the relation of distinction without opposition.

¹ *Dict. des sciences phil.*, article, "Scolastique."

This doctrine of the continuity and independence of the natural with respect to the supernatural order of truth is the core of Scholasticism. It is by this that Scholasticism is distinguished from Greek philosophy, of which the chief defect, as well as the paramount merit, was its complete naturalness. It is by this, too, that Scholasticism is distinguished from the philosophy of the new era. Modern philosophy — post-Reformation philosophy, as it may be called — was born of the revolt of philosophy against theology, of reason against faith. It adopted at the very outset the Averroistic principle that what is true in theology may be false in philosophy, — a principle diametrically opposed to the thought which inspired Scholasticism. Indeed, in the first great system which appeared in the modern era, not only is philosophy divorced from theology, but mind is placed in complete antithesis to matter ; for in Descartes' philosophy, the spirit of disintegration, which characterizes the modern era, is subversive not only of the work of the schoolmen but also of the best achievements of Greek speculation. Scholasticism distinguishes without separating ; modern philosophy either fails altogether to distinguish (*fideism, monism*), or distinguishes and separates (*rationalism, Cartesian spiritualism*).

It remains to point out the difference in character between Scholastic philosophy and the philosophy of the Patristic era. The Fathers, as well as the schoolmen, taught (as, indeed, all Christian philosophers must teach) that revelation cannot contradict reason, nor reason, revelation. But, although the Fathers employed reason in order to elucidate revelation, they did not carry the use of dialectic to the extent to which the schoolmen subsequently carried it : in ultimate resort, they insisted on the ascetico-religious rather than on the logical quality of mind as a condition requisite for the attainment of higher knowledge. Moreover, the Fathers were, with few exceptions, Platonists, while the schoolmen were practically all Aristotelians. Finally, while the Fathers, in conditions more or less unfavorable to

constructive effort, effected a partial synthesis of the speculative elements of Christian thought, the schoolmen, in a rejuvenated and completely Christianized Europe, in an age in which every circumstance was favorable to synthetic speculation, completed the synthesis begun in the Patristic age, and developed a philosophy which is as different from the philosophy of the Patristic era as the Neo-Latin Europe of the thirteenth century is from the decadent Latin Europe of the fifth.

SECTION C

MODERN PHILOSOPHY¹

Division. The period extending from the middle of the fifteenth century to the beginning of the seventeenth was one of intellectual ferment in which the philosophy of the schools gradually disappeared and modern philosophy came to be more and more definitely distinguishable. During the first half of the seventeenth century, Descartes expounded and defended the first great system of the new philosophy, a system which dominated the whole course of thought during that century and served as a starting point for the principal systems of the following century. Towards the end of the eighteenth century, however, an age of criticism was inaugurated in opposition to the dogmatism and empiricism of the Cartesian philosophy and its derivatives; so that at the opening of the nineteenth century we find a new era, in which the predominating influence is that of Kant. We have, therefore, the following division of modern philosophy:

FIRST PERIOD — TRANSITION FROM SCHOLASTIC TO MODERN PHILOSOPHY (1450–1600).

SECOND PERIOD — FROM DESCARTES TO KANT (1600–1800).

THIRD PERIOD — FROM KANT TO OUR OWN TIME (1800–1900).

¹ A general survey of the literature of the history of modern philosophy is given by Falckenberg, *Geschichte der neueren Philosophie*, 2. Aufl., p. 12; English trans. by Armstrong (New York, 1893), p. 15. Add to these lists Höffding's *History of Modern Philosophy*, trans. by Meyer (2 vols., London, 1900), and Kuno Fischer's *Geschichte der neueren Philosophie*, of which the fourth edition is being published by Winter, Heidelberg, 1899 ff. Consult also Weber, *History of Philosophy*, trans. by Thilly (New York, 1896), pp. 12 ff., and Burt, *History of Modern Philosophy* (Chicago, 1892), p. vi. Rogers' *Student's History of Philosophy* (New York and London, 1901) gives at the end of each section a select list of English readings.

FIRST PERIOD—TRANSITION FROM SCHOLASTIC TO MODERN PHILOSOPHY

The change from Scholastic to modern philosophy was gradual, and, while its course is not easy to follow, the causes which led to the change are not far to seek. First among these must be mentioned the decay of Scholasticism itself. The representatives of Scholastic philosophy in the fifteenth and sixteenth centuries seem for the most part to have completely forgotten the principles of the classic Scholasticism of the thirteenth century. Busying themselves with subtleties too refined to be grasped even by the learned, they utterly neglected the study of the scientific movement of their own day, and, in defiance of the method sanctioned by usage in the schools of the Golden Age of Scholasticism, raised the argument from authority to a position of undue importance. There were, however, as we shall see, some notable exceptions to this.

The decay of philosophical speculation in the schools and universities of the fifteenth and sixteenth centuries, the humanistic movement, the rapid progress of the natural sciences, and the influence of the first reformers contributed to bring about the transition from Scholastic to modern philosophy. Mention must also be made of the political condition of the times, the disintegration of the idea of a united Christian empire, the growth of the idea of the political individuality of nations, the discovery of America, the invention of the art of printing, all of which necessitated a development and adaptation of speculative thought to the changed conditions of the time. That Scholastic philosophy was capable of such development and adaptation must be admitted by all who recognize that thought is continuous in its historical evolution; and if such development and adaptation did not take place, the fault lay with those who failed to put Scholasticism in its true light at this the most critical period in its history.

CHAPTER XLVIII

SCHOLASTICS OF THE TRANSITION PERIOD

The exigencies of religious controversy arising out of the doctrines of the reformers brought about a revival of theological activity in the Catholic schools and universities of this period. The development of theological speculation naturally inspired the effort to restore and supplement the philosophy of the Scholastics of the thirteenth century. When, therefore, the charge of frivolity and master-worship is made against the Scholastics of the fifteenth and sixteenth centuries, exception must be made in favor of those schoolmen who went back to the sources of genuine Scholasticism and commented on the works of St. Thomas and Scotus.

Chief among the commentators of St. Thomas are **Paulus Barbus Sencinas** (died 1494), who followed in the footsteps of Capreolus, Thomas de Vio Cajetanus (**Cajetan**, 1469-1534), who wrote what is still considered the classic commentary on the *Summa Theologica* of St. Thomas, and Francis a Sylvestris of Ferrara (**Ferrariensis**) (1474-1528), who composed a masterly commentary on the *Summa contra Gentiles*. Mention must likewise be made of the theologians **Melchior Cano** (1509-1560), **Dominicus de Soto** (1494-1560), **Dominicus Bañez** (1528-1604), who commented on the *Summa Theologica*, and of **John of St. Thomas** (1589-1644), who wrote a *Cursus philosophicus ad exactam, veram et genuinam Aristotelis et Doctoris Angelici mentem*. Under the influence of these Dominicans and that of the great Carmelite teachers, new zest was given to the study of St. Thomas at Salamanca and Alcalá, while at the same time a new form of Thomism was developed by the Jesuit teachers at Coimbra and at other centers of learning in the Iberian peninsula. With this Neo-Thomism is associated the establishment of a school of Jesuit theology at the Roman college. It was

there that **Vasquez** (1551-1604) and **Toletus** (1532-1596) taught, who influenced to a great extent the subsequent development of Catholic theology. Among the Jesuits who taught at Coimbra the best known is **Fonseca** (1528-1599). **Suarez** (1548-1617), the ablest and most distinguished of the Jesuit theologians and philosophers of this time, is associated with the intellectual prestige of Salamanca, Coimbra, Alcalá, and Rome. His works, which include twenty-three folio volumes, contain, besides commentaries on the works of St. Thomas, treatises which, like the *Disputationes Metaphysicæ*, are important as independent contributions to the literature of Scholastic philosophy.¹

The principal representatives of the philosophy of Scotus are **John the Englishman** (died 1483), **Johannes Magistri** (died 1482), **Antonius Trombetta** (died 1518), and **Maurice the Irishman** (1463-1513).²

The philosophical significance of these teachers consists in the serious effort which they made to understand and expound the works of their predecessors, the great masters of Scholastic philosophy.

CHAPTER XLIX

THE HUMANISTS

The movement known as the Renaissance³ is commonly said to date from the reign of Nicholas V (1447). The principles, however, as well as the spirit of the movement, had appeared during the first years of the fifteenth century, and were propagated and fostered by the Greek scholars who flocked to Italy

¹ Cf. articles in *Science Catholique*, 1898, 1899, "Suarez metaphysicien, commentateur de St. Thomas."

² Cf. Wadding's *Vita Joannis Duns Scoti*, in Lyons edition of Scotus' *Works*, I, 4. Cf. also Wetzer u. Welte's *Kirchenlexikon*, article, "Mauritius a Portu."

³ Cf. Symonds, *The Renaissance in Italy* (5 parts in 7 vols., London, 1875-1886), Burckhardt, *The Civilization of the Renaissance*, trans. by Middlemore (London, 1890); Voigt, *Die Wiederbelebung des classischen Alterthums* (Berlin, 1893).

after the fall of Constantinople (1453). The Renaissance reached its Golden Age during the reign of Leo X (1513). It consisted in a revival of the study of the Greek and Roman classics, attention being paid to the form rather than to the contents of classical literature. The representatives of the movement were called "humanists," in allusion to their opposition to the Scholastics, who were alleged to have insisted on the divine, or supernatural, to the exclusion of the human, or natural, elements in their philosophical and theological and above all in their literary labors. The Renaissance is of interest primarily and essentially to the historian of literature. Secondly, however, and as it were accidentally, it vitally affected the fate of Scholastic philosophy and contributed to the transition from mediæval to modern modes of thought. The humanists claimed the privilege of ridiculing and attacking the schoolmen, and such was the deplorably degenerate condition of Scholasticism at the time that the ridicule was often deserved and almost always successful. But, not content with censuring what was deserving of censure, the humanists went so far as to condemn the entire system of Scholastic philosophy and to include in their condemnation the work of the thirteenth century masters, whose doctrines they never seriously attempted to understand. While lauding the literary excellence of the pagan classics, they lost no opportunity of defaming the great representatives of Christian thought; they were *detractores*, as well as *laudatores, temporis acti*.¹

In addition to this general opposition of the humanists to the learning of the schools, there appeared among the representatives of the Renaissance a more direct form of anti-Scholasticism in the shape of a revival of the doctrines of the Platonic academy. **Gemistus Pletho**, a Greek scholar who had attended the council of Florence as ambassador of the Emperor John VIII, inspired Cosmo de' Medici with the idea of founding a Platonic academy

¹ On the attempts of the humanists to restore pagan modes of thought and speech, cf. Pastor, *History of the Popes*, English trans., Vol. V, pp. 140 ff.

at Florence. He was aided in the work of expounding Platonism by Cardinal **Bessarion** (1403-1472), who was also a Greek. Among the Italian humanists, **Lorenzo Valla** (1400-1457), **Marsilio Ficino** (1433-1499), **Giovanni Pico della Mirandola** (died 1494), and his nephew, **Giovanni Francesco Pico della Mirandola** (died 1533) distinguished themselves by the violence and acrimony with which they attacked the Aristotelians. At the same time **Theodore of Gaza** (died 1478) and **George of Trebizond** (1396-1484) rose into prominence as defenders of the philosophy of Aristotle.¹

Not only Platonism and Aristotelianism, but also Stoicism and Epicureanism, had their representatives among the humanists. **Justus Lipsius** (Jøest Lips) (1547-1606) and **Caspar Schoppe** (born 1562) revised the doctrines of the Stoa, while **Gassendi** (1592-1655) reproduced the essential doctrines of Epicureanism.

Paracelsus (1493-1541) undertook the reform of medical science, and developed a system of speculative thought in which chemistry and theosophy are mingled in the most fantastic manner. His influence is noticeable in the writings of **Robert Fludd** (died 1637) and in those of the two **Van Helmonts** (died 1644 and 1699).

Scepticism, a natural outcome of the intellectual confusion of the times, was represented in France by **Montaigne** (1533-1592) and **Pierre Charron** (1541-1603), and in Portugal by **Francisco Sanchez** (died 1632).

Far more important than these attempts of some of the humanists to restore the Platonism, Stoicism, Epicureanism, and Pyrrhonism of ancient times was the controversy waged by the various interpreters of Aristotle on the question of the immortality of the soul. **Pietro Pomponazzi**, or **Pomponatius** (1462-1530), maintained that the Alexandrian interpreters understood Aristotle to teach that the human soul is mortal, and contended that this was the genuine mind of the Stagyrite. **Achillini**, **Nifo** (Niphus), and others followed the Averroistic interpretation, and

¹ The works of Pletho, Bessarion, and other Greek writers of this period are to be found in Migne's *Patr. Græca*, Vols. CLX-CLXI.

contended that the separate, or impersonal, soul alone is immortal, the individual soul being immortal according to theology, but mortal according to philosophy.

Of great importance, too, was the anti-Aristotelian movement inaugurated by **Petrus Ramus** (Pierre de la Ramée, slain in the massacre of St. Bartholomew's day, 1572), who opposed the accepted Aristotelian system of logic, and, in his treatises *Aristotelicæ Animadversiones* and *Institutiones Dialecticæ*, attempted to formulate a new system of logical doctrine.

From the ferment of thought occasioned by the mingling of all these elements there emerged a more or less definite system of naturalism known as the *Italian Philosophy of Nature*.

CHAPTER L

ITALIAN PHILOSOPHY OF NATURE

This school is characterized by naturalism and a tendency towards pantheism. **Cardano** (1501–1576), a Milanese physician, was the first to formulate the principles of modern naturalism. These principles were reduced to a system of speculative thought by the Calabrian Bernardino **Telesio** (1508–1588), who is, therefore, regarded as the founder of the school. In his work *De Rerum Natura juxta Propria Principia*, he advocates the use of the empirical method of investigating nature, and formulates a system according to which the universe results from the combination of three principles, *matter, heat, and cold*. **Patrizi** (1520–1597), in his *Nova de Universis Philosophia*, combined the doctrines of Neo-Platonism with the naturalism of Telesio, and thus imparted to the school its pantheistic tendency. These pantheistic principles reached their logical development in the full-blown systems of pantheism of Bruno and Campanella.

GIORDANO BRUNO

Life. Giordano Bruno was born at Nola, in Campania, in the year 1548. At an early age he entered the order of St. Dominic, but his distaste for Scholasticism and his enthusiasm for the writings of Telesio developed before long a spirit of dissatisfaction with his order and with the teachings of the Church. Discarding the garb of religion, he wandered through Italy, France, England, and Germany, and is said finally to have joined the reformed Church. Apparently, however, he found Protestantism as distasteful as the religion he had abandoned. Returning to Italy (1592), he was arrested by the Inquisition at Venice, and was burned at the stake in Rome in the year 1600. His principal works are *Della causa, principio, ed uno* and *Del infinito universo e dei mondi*.¹

DOCTRINES

Bruno's philosophy is a system of naturalistic *pantheism*: its pivotal thoughts are the doctrine of the identity of God with the world and the Copernican idea of the physical universe.

God, he teaches, is identical with the universe, for the universe is infinite, and there cannot be two infinities. God is, therefore, the sum of all being, and the phenomena, or accidental forms of being, which exist, are merely the unfolding (*explicatio*) of the immensity of God. He is the *original matter* of the universe (and on this point Bruno cites the authority of David of Dinant), as well as the primitive form, the *world-soul*, which vivifies the original matter. Indeed these two, matter and form, not only interpenetrate each other, but are absolutely identical. God is also the final cause of all things; for to Him, the God-universe, all things are constantly returning.

The *universe* is, therefore, *essentially one*: the Aristotelian distinction between celestial and terrestrial matter can no longer be maintained. The stars are part of our solar system, or are themselves suns surrounded by planets and forming part of the

¹ *Opere di Giordano Bruno Nolano* (Leipzig, 1830). Other editions by Tocco (Naples, 1891) and Wagner (Leipzig, 1829), etc.

one great system which is the universe. It is in this portion of his philosophy that Bruno makes use of the discoveries of Copernicus.

The *universe is ruled by law*: there is no place for human freedom in this system of determinism. The soul is an emanation from the Divine Universe, and all organisms are composed of living monads each of which reflects all reality.

TOMMASO CAMPANELLA

Life. Tommaso Campanella was born in Calabria in the year 1568. In 1583 he entered the order of St. Dominic. Arrested on suspicion of conspiring against the Spanish rule, he was cast into a dungeon at Naples. After spending twenty-seven years in prison he escaped to Paris, where he died in 1639. His most important work is *Universalis Philosophia*.

DOCTRINES

Campanella's philosophy is the resultant of various influences, chief among which are the naturalism of Telesio, the Greek Pyrrhonism restored by the humanists, and the enthusiasm for the study of nature which resulted from the discoveries made by Copernicus and Galileo.

Campanella starts by inquiring into *the conditions of knowledge*. The veracity of the external senses rests on the testimony of the *inner sense*. On this inner sense rests also the belief in my own existence and in the existence of God. The inner sense testifies, moreover, to the existence of three functions in my own soul, — *power, knowledge, and volition*. By thinking away the limitations of the power, knowledge, and volition, of which I am conscious, I arrive at an idea of an Infinite Being possessed of *omnipotence, infinite wisdom, and infinite love*. These three are, then, the "pro-principles" of infinite being: they are also the pro-principles of created being. For all creatures are endowed with life, feeling, and desire: they all proceed from

God and they desire to return to Him, as is evident from the universality of the creature's dread of annihilation. This desire of the creature to return to the Creator is a kind of religion, and so far is atheism from being true that the most universal of all phenomena is the religious tendency by which every created being proclaims the existence of God. This thought is developed by Campanella in a treatise entitled *Atheismus Triumphatus*.

In the *Civitas Solis* Campanella outlines his ideal scheme of political government. The scheme is based on the idea of the divine government of the world communicated through the papacy to a world-monarchy and through this to the individual kingdoms, provinces, and cities.

Historical Position. The Italian school of natural philosophy resulted from the repudiation of Scholasticism by the humanists and the inauguration, by scientific discoveries, of a new era of nature-study. The extraordinary enthusiasm with which the contemporaries of Copernicus and Galileo addressed themselves to the study of natural phenomena is seen in the naturalistic pantheism of the Italian school no less clearly than in the extravagance of the Paracelsists and others who devoted themselves to the occult sciences and the practice of magic. But whatever may be said of the occultists and magicians, it is certain that the scientific discoveries would never have led to naturalism and pantheism if the principles of Scholastic philosophy had not fallen into discredit. Let us pass, therefore, to the study of the scientific movement and its influence on Scholastic philosophy.

CHAPTER LI

THE SCIENTIFIC MOVEMENT

The forerunner of the great scientific movement of the sixteenth century was **Nikolaus of Cusa** (1401-1464). Nikolaus was born at Kues, or Cusa, near Treves, in 1401. At an early age he joined the community of the Brothers of the Common Life at Deventer. Later he studied law, mathematics, and philosophy at Padua, but finally decided to abandon the legal profession and took holy orders. In 1448 he was made cardinal, and two years later was appointed to the see of Brixen. He died at Todi in Umbria in 1464. His most important works are the treatise *De Docta Ignorantia* and the dialogue entitled *Idiota de Sapientia Libri Tres*. These were published at Paris in 1514 and at Basel in 1565.

In his speculative philosophy Nikolaus occupies a position intermediate between Aristotelian and modern thought: he insists with special emphasis on the doctrine of the *unity of opposites* (*coincidentia oppositorum*) and on the principle that the beginning of true wisdom is the knowledge of one's own ignorance (*Docta Ignorantia*). Among his astronomical teachings is that of the rotation of the earth on its axis, — a doctrine to which Copernicus subsequently gave scientific form.

Nicholas Copernicus (1473-1543) was born at Thorn in Poland in 1473. After studying at Cracow, Bologna, and Padua, he became canon of Frauenburg. In a treatise *De Orbium Celestium Revolutionibus*, which appeared in 1543 and was dedicated to Pope Paul III, he defended the heliocentric system of astronomy and definitely placed the earth among the solar planets.

Tycho Brahe (1546-1601) furnished, by his accurate observations, materials for the work of Kepler.

Johann Kepler (1571-1631) gave further development to the heliocentric hypothesis by discovering the form of planetary orbits and the laws of planetary motions.

Galileo Galilei (1564-1642) taught the twofold motion of the earth and discovered the satellites of Jupiter and the laws of their motions.

The discoveries of **Boyle** (1627-1691) and of **Newton** (1642-1727) were as important in the department of physics as were those of Copernicus, Kepler, and Galileo in the department of astronomy. All these, however, are of interest to the student of philosophy principally because of their effect on the course of speculative thought.

Influence of Scientific Discoveries on the Development of Philosophy. The attitude which Catholic and Protestant theologians of the sixteenth century assumed towards the discoveries of Galileo and Kepler is well known. The antagonism, however, between the old and the new modes of thought resulted from a misunderstanding. There is no inherent contradiction between the broad principles of Aristotelian and Scholastic philosophy on the one hand and the new physics and astronomy on the other. Aristotle had advocated the investigation of nature, and the greatest of the schoolmen had insisted on the importance of building a science of nature on the basis of empirical knowledge. St. Thomas, in a remarkable passage, had acknowledged the possible advent of a theory which would subvert the entire structure of Aristotelian astronomy: in reference to the hypotheses (*suppositiones*) by which the ancient astronomers attempted to explain the irregularities of the motions of the planets, he had written:

Illorum autem suppositiones quas adinvenerunt non est necessarium esse veras . . . quia forte secundum alium modum nondum ab hominibus comprehensum apparentia circa stellas salvatur.¹

The Scholastics, therefore, who attacked the representatives of the new science were false to the principles of their school. Had they known and fully felt the spirit of Aristotelian and Scholastic philosophy they should have put an end to their fruitless discussions, shaken off the yoke of a false method, and gone forth with the representatives of the new science to investigate nature. They should have adopted as their motto "Anteire decet, non subsequi" and taken the lead in the advance guard of discovery. Instead of doing this, they antagonized science, so that when the new age, dominated by the scientific spirit, sought to found a system of metaphysics, it never for a

¹ *In Lib. II^{um} De Celo*, Lect. 17. In the *Sum. Theol.*, I^a, XXXII, 1, ad 2^{um}, we find the same thought expressed in language almost identical with that of the passage quoted in the text.

moment considered that in the Aristotelian and Scholastic system of philosophy it already possessed the metaphysics which best accorded with the results of scientific discovery. When, therefore, we study the causes of the misunderstanding between science and Scholastic philosophy, we must lay the burden of the blame on the shoulders of the degenerate representatives of Scholasticism, who, by betraying at the critical moment of its history the great system which they were supposed to defend, did that system a wrong which all the efforts of their successors have not succeeded in righting. The discredit of Scholasticism was due not to a lack of ideas, but to a lack of men to set forth those ideas in the proper light. Moreover (if we are to vindicate Scholasticism at the expense of Scholastics), we must not overlook the dependence of the scientific movement itself on Scholastic philosophy. Humanism grew out of Scholastic soil, and owed more to Scholastic vigor and clearness of thinking than we are commonly aware of. The scientific revival also owes much to the learning of the schools. Columbus and Copernicus, who did more than any of their contemporaries to revolutionize modes of thought, appealed to their contemporaries on the strength of texts from Aristotle and Philolaus. It was by reasoning on the texts of Strabo and Ptolemy that Columbus convinced himself of the existence of a new country beyond the western ocean ; and it was by meditating on the glory of God and on the spread of the Christian religion, which he deemed his special vocation in life, that the great mariner acquired the courage to brave the perils of unknown seas. We must keep these facts in mind, and not be too quick to regard the discoveries of this age as out of all relation with the past. Scientific discoveries form no exception to the law that thought flows in a continuous stream from one generation to another.¹

¹ Cf. Symonds, *The Revival of Learning*, pp. 19 ff., and Brother Azarias, *Aristotle and the Christian Church*, p. 126.

FRANCIS BACON

Life. Francis Bacon was the first to attempt the construction of a system of empirical philosophy on the basis of the principles of the new scientific method. He was born in London in 1561. After studying at Cambridge he spent two years in Paris, as companion of the English ambassador. Returning to England, he adopted the legal profession. In 1595 he entered Parliament, became adviser of the crown in 1604, and keeper of the Great Seal in 1617. In 1618 he was made lord chancellor, with the title of Baron Verulam, to which, three years later, that of Viscount St. Albans was added. He was charged, as is well known, with bribery and corruption, and, on pleading guilty to the accusations, was deprived of his office and fined £40,000. He died in 1626.

DOCTRINES¹

Bacon set himself the task of reorganizing all the branches of scientific knowledge, and with this purpose in view he proposed to expound a new method of scientific study and to treat of each of the sciences with special reference to the making of scientific and practical discoveries. The work in which this plan was to be realized is called the *Instauratio Magna*, of which the first part, entitled *De Dignitate et Augmentis Scientiarum*, treats of the reorganization of the sciences, and the second part, entitled *Novum Organum*, contains the theory of induction and of scientific method. To the sciences themselves, and to their application to discovery, Bacon contributed merely a portion of his projected work, descriptive of natural phenomena, and entitled *Historia Naturalis, sive Sylva Sylvarum*.

Philosophy has for its object a knowledge of God, nature, and man. Our positive knowledge of God belongs to faith, for reason can give us merely a negative knowledge of God by refuting the objections urged against faith, and by showing the

¹ Consult Nichol, *Bacon (Blackwood's Philosophical Classics*, Edinburgh and Philadelphia, 1888); Fischer, *Bacon and his Successors*, translated by Oxenford (London, 1857). The most recent edition of Bacon's complete works is that by Spedding and Heath (London, 1857 ff.).

absurdity of atheism. "It is true," Bacon says, in a well-known passage in his *Essays*, "that a little philosophy inclineth men's minds to atheism : but depth in philosophy bringeth men's minds about to religion."¹

Bacon distinguishes *first philosophy* (*philosophia prima* or *scientia universalis*), which treats of the concepts and principles underlying all the parts of philosophy, and the *philosophy of nature*, which is subdivided into *speculative* and *operative*, the latter being defined as natural philosophy in its application to mechanics and other arts.²

The first step towards attaining a knowledge of nature consists in purifying the mind by the exclusion of the phantoms, or *idols*, which interfere with the acquisition of knowledge. The *idols*, or false appearances, are reduced to four classes : (1) *Idols of the tribe*. These are common to all men, and are, in some way, derived from the very nature and limitations of the human mind. Such, for example, is the tendency to anthropomorphize. "For the mind," Bacon observes, "is not a plane mirror, but a mirror of uneven surface which combines its own figure with the figures of the objects it represents." (2) *Idols of the den*. These arise from the peculiar character of the individual. Some minds are naturally analytical, while others are naturally synthetic. To each belongs its own peculiar class of idols of the den. (3) *Idols of the market place*. These arise from the intercourse of men, and from the peculiarities of language. For words, Bacon warns us, are symbols of conventional value, and are based on the carelessly constructed concepts of the crowd. (4) *Idols of the theater*. These are false appearances arising from tradition and the authority of schools and teachers.³

Having freed his mind from the false appearances of truth, the searcher after knowledge must next proceed to a personal

¹ Cf. *Essay on Atheism* (*Works*, edited by Spedding, Vol. XII, pp. 132 and 337) and *Meditation on Atheism* (Vol. XIV, p. 93).

² Cf. *Works*, II, 89.

³ *Ibid.*, I, 250 ff.

and *active investigation of nature*. He must not spin science from his own inner consciousness, as the spider spins its web from its own substance: he must, like the bee, collect material from the world around him and elaborate that material by the process of reflection and meditation. He must observe facts and proceed from the observation of facts to the establishment of laws and axioms. Bacon notes that the "*inductio per enumerationem simplicem*," of which alone Aristotle and the schoolmen treat, is "scanty and slovenly," because it is based on the observation of positive instances merely, and neglects to take negative instances into account, whereas induction should consider *negative instances* and instances of difference of degree as well as positive instances. These hints were taken up by John Stuart Mill, to whom we owe the four experimental methods of induction. The chief difference between the Aristotelian and the Baconian induction consists in this, that the former proceeds by *accumulation* of instances, while the latter is based on the *elimination* of non-typical instances and the discovery of decisive or "prerogative" instances.¹

In his effort to accentuate the importance of the inductive method of acquiring knowledge, Bacon committed the grave error of throwing discredit on the deductive, or syllogistic, process. Failing to recognize that each method has its use, he carried his hostility to the deductive method so far as to refuse to admit on deductive evidence the Copernican system of astronomy.²

Historical Position. Little or nothing has been said of the contents of Bacon's philosophy. Indeed, it is by the method which he inaugurated, rather than by the content of his system of thought, that Bacon is to be judged. His attempts at personal investigation in accordance with the rules which he laid down were, for the most part, crude, and were far less successful than the experiments made by many of his contemporaries.

¹ Cf. *Works*, I, 344 ff.

² Cf. *ibid.*, VI, 44; IX, 14, 15; X, 422.

It was for a long time an axiom almost universally accepted that all the scientific progress made since the days of Bacon was due to the employment of the scientific method which he inaugurated. Recently, however, a more moderate view has begun to prevail. While it is conceded that Bacon deserves exceptional credit for having called attention to the necessity of an active investigation of nature, it is recognized also that he committed a serious mistake in discountenancing the use of deduction. It is historically demonstrable that the hypothetical anticipation of nature, by means of deduction, is as fruitful of scientific discovery as is the use of the inductive method, and Mill, with all his admiration for Bacon's method, acknowledges that no great advance can be made in science except by the alternate employment of induction and deduction. Descartes, who, as we shall see, advocated and used the deductive method, made more important contributions to natural science than did Bacon, the author of what has been called *the scientific method*.

CHAPTER LII

PROTESTANT MYSTICISM

Mention has already been made of the Protestant Reformation as one of the causes which led to the change from mediæval to modern modes of thought. Perhaps it would be more correct to regard both the Reform and the rise of modern philosophy as effects of a common cause; for modern philosophy is, as Erdmann observes, "Protestantism in the sphere of the thinking spirit." At all events, wherever the influence of the first reformers asserted itself, Scholastic philosophy was discouraged, and an effort was made to replace it by a new order of ideas. Lutheranism, according to Erasmus, was opposed to all literary culture: "Ubicumque regnat Lutheranismus, ibi literarum est interitus." Whether this be true or false, certain it is that

not only Luther, but also Zwingli, Calvin, and Melanchthon, did their utmost to eradicate the principles of Scholasticism. Scholasticism stood for ecclesiasticism, orthodoxy, respect for authority, in a word, for everything against which the first reformers protested.

Among the reformers themselves there soon sprang up systems of philosophy. **Luther** (1483-1546), by his distinction between reason (a function of the flesh) and faith (a function of the spirit), laid the foundation for psychological dualism. **Zwingli** (1484-1531), imbued with the spirit of humanism, maintained a pantheistic doctrine of Divine Immanence, and taught that man is deified by divine regeneration. **Melanchthon** (1497-1560) developed a system of Aristotelian philosophy which may be styled a Protestant Scholasticism.

Of greater importance than these philosophical tenets of the first reformers are the systems of mysticism which grew out of the religious doctrines of the Reformation. **Franck** (1500-1545), of whom mention has already been made,¹ developed a system of mysticism characterized by pantheism and psychological dualism (antithesis of flesh and spirit). He was succeeded by **Weigel** (1533-1588), who taught that regeneration is to be attained by abandoning the *I-ness* (*Ichheit*) of the individual nature. All these mystic tendencies find their fullest expression in the writings of **Jakob Böhme** (1575-1624), the chief representative of Protestant mysticism.

JAKOB BÖHME

Life. Jakob Böhme was born at Altseidenberg, near Görlitz, in the year 1575. Until he was ten years old, he received absolutely no education, and he never extended his knowledge of literature beyond an acquaintance with the Bible and with the writings of Weigel. He earned his living by mending shoes, and the "Cobbler of Görlitz" is sometimes referred to as the "German Philosopher" in allusion to the fact that his works

¹ Cf. p. 414.

were composed in German — the only language in which he could write. He died in 1624. His principal work is entitled *Aurora, or the Rising Dawn*.

DOCTRINES

Böhme devoted special attention to the problem of evil. He taught that the ultimate cause of the evil which exists in the world is the *eternal dualism of God* Himself. Perceiving one day the sunlight reflected from a tin vessel, he conceived the idea that, as the dark vessel reveals the brightness of the sun, so the element of evil in God shows forth the goodness of the Divine Nature. For everything, he taught, is known by its opposite. Without evil there would be no revelation of God, no distinction of things, no life, no movement. Nay, more, if there were not in God a principle antithetical to goodness, God could not even arrive at a knowledge of Himself.

Developing this idea of the dualism of the Divine Nature, Böhme describes in the language of mysticism the eternal nature of God as containing *seven primordial qualities*, of which three represent the divine anger and three the divine love. Intermediate between these is the divine fire which is the principle of life. The Divine Nature in the first stage of development, namely, in that of will without object, is God the Father. The Father, looking into His own nature, forms in Himself the image of Himself and thus "divides" into Father and Son. The procession of this vision from the original groundless nature of God as will, is God the Holy Ghost. Lucifer became enamored of the anger qualities of God, and, refusing to take part in the advance from darkness to light, remained wholly evil. As a result of the fall of Lucifer, the material world was created. *Heaven and hell* are experienced here on earth: he who, like Lucifer, becomes enamored of evil, and clings to it, is in hell, while he who renounces all the evil that is in self, and joins in the development of light from darkness, is in heaven.

Historical Position. In the writings of Böhme we see the mystic tendency run riot. Free from the restraint of orthodox dogma, Böhme made the fullest use of the Protestant principle of private interpretation, and expounded the doctrines of scripture from the extreme individualistic point of view. No one, however, can question the intense earnestness, the true-hearted sensibility, and the unusually deep and vigorous spirituality of the man. It is these qualities that have secured for Böhme a permanent place in the history of German literature. They also account for the influence which he exerted on such men as Schelling and Hegel.

CHAPTER LIII

SYSTEMS OF POLITICAL PHILOSOPHY

The growing sense of political individuality and the gradual dwindling of the ideal of a universal Christian empire were most important factors in the change from ancient to modern modes of thought. Dante's *De Monarchia* no longer embodied the political aspirations of European states. Humanism, moreover, had restored ancient ideals of political life, and the result was an attempt on the part of some Renaissance writers to formulate systems of political philosophy which should meet the conditions of the times.

The first independent political philosopher of this period was **Niccolò Machiavelli** (1469-1527). In the celebrated work entitled *Il Principe* and in his other writings Machiavelli expounds a system of *state utilitarianism*. He teaches that, in the government of the state, means are to be judged exclusively with reference to the end for which they are employed, without consideration, or at least without due consideration, of the relation which they bear to the principles of morality. "Where it is a question of saving one's country," he writes, "there must be no

hesitation on the score of justice or injustice, cruelty or kindness, praise or blame, but, setting all things else aside, one must snatch whatever means present themselves for the preservation of life and liberty."¹ Machiavelli waged war on the Christian religion, contending that Christianity is opposed to the true advancement of the state, and that it is inferior to the religion of ancient Rome, inasmuch as it fails to inculcate the political virtues. His *ideal of a ruler* is that of one who should combine the qualities of the fox with those of the lion. The ruler should make himself liked if he can; if he cannot, he must make himself feared: he should maintain the outward semblance of honesty and morality even when, for reasons of state, he is obliged to set the principles of honesty and morality aside.²

Thomas More (1478–1535) and **Jean Bodin** (1530–1596), inspired by a spirit altogether different from that which animated Machiavelli, developed from Platonic principles highly ideal schemes of state organization and government. More (Blessed Thomas More, as he is now entitled to be called) was educated at Oxford, and after some years of very successful practice at law entered into political life, becoming successively Speaker of the House of Commons, treasurer to the exchequer, and lord chancellor. Having incurred the displeasure of Henry VIII, he was committed to the Tower, and after eighteen months' imprisonment was executed on the charge of attempting to deprive the king of the title of Supreme Head of the Church in England. In his *Utopia* (*De Optimo Reipublicæ Statu deque Nova Insula Utopia*) he describes an imaginary republic so governed as to secure universal happiness. Bodin is more scientific in his method than any of the other political philosophers of this period. He may be said to have inaugurated the historical method of studying political philosophy.

¹ *Discorsi sopra la prima deca di Tito Livio*, III, 41, quoted by Pastor, *op. cit.*, V, 165.

² *Il Principe*, Capp. 15 ff.

THOMAS HOBBES

Life. Thomas Hobbes was born at Westport, now in Malmesbury in Wiltshire, in 1588. He was educated at Oxford, and during his repeated sojourns at Paris he became acquainted with Gassendi, Mersenne, and Descartes, who had a marked influence on his system of speculative philosophy. His political doctrines were influenced, no doubt, by the disorders of the English Revolution. He died in 1679. His principal works are *Leviathan, sive de Materia, Forma et Potestate Civitatis Ecclesiasticæ et Civilis*, and *Elementa Philosophiæ* including three parts: *De Corpore*, *De Homine*, and *De Cive*.¹

DOCTRINES²

Hobbes, like Bacon, concerned himself chiefly with the practical aspect of philosophy; but instead of applying philosophical principles to technical inventions, as his fellow-countryman had attempted to do, he addressed himself to the task of applying philosophy to *the solution of political questions*. We shall study, therefore, first the speculative and secondly the political doctrines of Hobbes.

1. Speculative Philosophy. Hobbes is the first in a long line of English *nominalists* and *sensists*. *The only universality* which he admits *is that of the name*. The name is a sign taken at pleasure to designate a plurality of objects. It is for us to decide what objects a name shall designate, and the announcement of such a decision is what we call a definition. In this connection he remarks that "Words are wise men's counters; they do but reckon by them: but they are the money of fools."³

¹ *De Cive* (1642) was translated in 1651 under the title *Philosophical Rudiments concerning Government and Society*. The *Leviathan, or the Matter, Form, and Authority of Government*, appeared in English in 1651 and was translated into Latin in 1670. Extracts from the English edition are given in Woodbridge, *Philosophy of Hobbes* (Minneapolis, 1903).

² Consult Robertson, *Hobbes* (Blackwood's *Philosophical Classics*, Edinburgh and Philadelphia, 1886); Tönnies, *Hobbes* (Stuttgart, 1896). Hobbes' complete works were published by Molesworth (London, 1839 ff.).

³ This and the following quotations are given by Lewes, *Biog. Hist. of Phil.* (2 vols., New York, 1893), pp. 495 ff.

Reality is not only individual, it is also corporeal. All that exists is body, all that occurs is motion. Spiritual substance can neither be nor be thought. Neither is there in human knowledge any element superior to sense. "The original of them all," he says, speaking of men's thoughts, "is that which we call sense, for there is no conception in a man's mind which hath not at first, totally or by parts, been begotten upon the organs of sense." From the foregoing principles Hobbes is led to affirm the doctrine of *subjectivism*." "I shall endeavor," he writes, "to make plain these points: that the object wherein color and images are inherent is not the object or thing seen: that there is nothing without us (really) which we call image or color: that the said image or color is but the apparition unto us of the motion, agitation, or alteration which the object worketh in the brain or spirits or some internal substance of the head."

2. Political Philosophy. Hobbes begins by denying the doctrine on which Aristotle's philosophy of the state is based, the doctrine, namely, that man is a political animal. The English philosopher assumes rather the Epicurean principle that originally there existed a *condition of natural warfare* among men — *homo homini lupus*, or *bellum omnium contra omnes*. But, he goes on to say, when men discovered the disadvantages of continual strife, and realized that the safety of life and property is a condition essential to progress, they entered into a compact, by which it was stipulated that the individual should vest all his rights in the supreme and absolute authority of the state. The authority of the state has its origin, therefore, in a *social compact*, and since the renunciation and transference of private rights was complete and unreserved, the authority of the state is absolute. Hobbes carries the doctrine of *state absolutism* to the extreme of subjecting even conscience and religion to the authority of the ruler. He teaches that the will of the ruler is the supreme arbiter of right and wrong in the moral order and of true and false in the matter of religious belief.

Historical Position. It would be difficult to overestimate the influence of Hobbes on the subsequent development of philosophic thought in England. Despite the wise maxim quoted above, philosophers have too often used words as money rather than as counters, and all the confusion arising from the use of vague and inaccurate terminology — a confusion which is, to the present day, the bane of English philosophy — may be traced, in large measure, to Hobbes. For him, *substance* and *body*, *imagination* and *intellect* are synonymous, and if these terms are confounded by subsequent writers, upon Hobbes must be laid the chief part of the blame.

The causes which led to the study of political philosophy during the transition period led also to the study of the *philosophy of law*. The Italian **Alberico Gentili** (1552–1608) paid special attention to the study of the *law of war*. The German **Althus** (1557–1638) devoted himself to the study of *Roman law*. To these succeeded the Netherlander **Hugo Grotius** (Hugo de Groot) (1583–1645), who in defending the rights of his country to free trade with the Indies developed a system of philosophy of *natural law*. His most celebrated work is entitled *De Jure Belli et Pacis* (1625). He maintains the doctrine of *social contract*, but while Hobbes regards the transference of the rights of the individual to the state as irrevocable, Grotius considers that rights once transferred may afterwards be recalled. He favors the separation of Church and State, and advocates religious toleration. By the phrase *jus gentium* he does not mean natural law but rather positive international law, or the law regulating the relations of one state with another.

Retrospect. The period of transition from mediæval to modern philosophy was a period of tendencies rather than of systems. It was an age of new ideas, and of changes in the world of letters, science, politics, and religion. It witnessed the disappearance of the old order and the advent of the new. During this period of change, the Aristotelian and Scholastic idea of a

geocentric universe gave way to the modern scientific notion of a heliocentric system ; the mediæval ideal of a universal Christian empire gave way to the modern ideals of individual national life ; and in many European states the spirit of ecclesiastical unity disappeared, to be replaced by the notion of national church organization and the assertion of individualism in matters of religious belief. Thus did the Renaissance period usher in the modern era. It did not itself contribute any permanent system of philosophy. To systematize in a speculative scheme of thought the wealth of ideas, facts, and tendencies resulting from the great intellectual movements of the fifteenth and sixteenth centuries, was the task which the Renaissance set and which the seventeenth century undertook to accomplish.

SECOND PERIOD—FROM DESCARTES TO KANT

The second period in the history of modern philosophy extends from Descartes to Kant, that is, from the beginning of the seventeenth century to the end of the eighteenth. It comprises some of the greatest modern systems of thought, namely, the philosophies of **Descartes**, **Spinoza**, **Leibniz**, **Locke**, **Berkeley**, and **Hume**, the last forming, as it were, the connecting link with the period of criticism inaugurated by Kant. The period which we are about to study is one of dogmatism and empiricism, although it includes, as we shall see, more than one system of scepticism, partial or complete. It is a period during which intellectual activity within the Church is confined for the most part to the domain of theology : philosophy no longer stands to theology in the close relation in which it had stood during the Middle Ages, and battles, in which the most vital principles of religion are involved, are fought outside the Church, and in the domain of philosophy. This dissociation of philosophy from theology is one of the characteristics of the period.

CHAPTER LIV

DESCARTES

Life. René Descartes was born at La Haye, in Touraine, in the year 1596. He studied at the Jesuit college of La Flèche, and throughout his life maintained the most friendly relations with his teachers, his greatest regret being their refusal to accept his philosophy. On quitting the college of La Flèche (1612) he went to Paris, where for a time he abandoned all serious study; later, however, in obedience to the maxim *Bene vixit qui bene latuit*, which he made the guiding principle of his life, he retired into seclusion in a lonely quarter of the city, and there continued his studies. In 1617, determined to study the great book of the world, he took service as a volunteer in the army of Prince Maurice of Nassau, repairing first to Holland, and afterwards to Germany, where he left the army of Prince Maurice for that of the Elector of Bavaria. While in winter quarters at Neuburg on the Danube, in 1619-1620, he experienced the mental crisis of his life, and discovered, as he tells us, "the foundations of a wonderful science" — the principle, namely, that all geometrical problems may be solved by algebraical symbols. It was in this same *mental crisis* that the notion of universal methodic doubt first occurred to him, as well as the thought that "the mysteries of Nature and the laws of Mathematics could both be unlocked by the same key."¹ After a brief visit to his native place, he took up his abode in Holland in 1629, and there published his most important philosophical works, the *Discours de la méthode* (1637), *Meditationes de Prima Philosophia* (1641), and *Principia Philosophiæ* (1644). At the invitation of Queen Christina of Sweden, he went to Stockholm in 1649, where he died in the early part of the following year.

Sources. Besides the works mentioned in the preceding paragraph, Descartes wrote a *Traité des passions de l'âme* published in 1650. Among his posthumous works the most important are the *Recherche de la vérité* and *Règles pour la direction de l'esprit*, published in 1701. His *Letters* (published 1657-1667) are important for the understanding of his doctrines. The collected works of Descartes were published in 1650 and 1701. Cousin's edition (11 vols., Paris, 1824-1826) has long been the standard edition. It will doubtless be superseded by the edition which is

¹ "In otii hibernis naturæ mysteria componens cum legibus matheseos, utriusque arcana eadem clave reserari posse ausus est sperare." Epitaph composed by Chanut.

being prepared by Messrs. Adam and Tannery, and of which three volumes have already (1901) appeared. With regard to secondary sources, it is impossible to give here an adequate list. Mahaffy's *Descartes*, included in *Blackwood's Philosophical Classics* (Edinburgh and Philadelphia, 1894), is an excellent manual for English students of Descartes.¹

DOCTRINES

Physical and Mathematical Doctrines. Descartes' contributions to the mathematical and physical sciences, important as they are, cannot be treated here except in a general way. Descartes is the founder of analytical geometry; to the science of algebra he contributed the treatment of negative roots and the invention of the system of index notation; to physics he contributed the first statement of the "law of sines" in reference to the refraction of light. This last point is, however, a matter of dispute, the discovery being by some authorities attributed to Snellius.²

Descartes' Method. Descartes, as is well known, advocates *universal methodic doubt* as the beginning of philosophical thinking. During his sojourn at Neuburg, to which allusion has already been made, he occupied himself with the project of finding some one certain truth and of discovering "the true method of attaining to the knowledge of all things of which his mind was capable." With this purpose in view he first resolved to get rid of all prejudices acquired from books, and to call in question all the principles and conclusions of science and philosophy. It is to be remarked that Descartes did not propose this method of doubt as a means to be used indiscriminately by all; the resolution which he made was merely for his personal use.

¹ Consult Bouillier, *Histoire de la philosophie cartésienne* (troisième édition, Paris, 1868); also Wallace, article on "Descartes" in *Encyclopædia Britannica*. Translations: *Method, Meditations*, etc., by Veitch (tenth edition, London, 1890); *Meditations*, by Lowndes (London, 1878); *Extracts*, by Torrey (New York, 1892).

² Cf. *Revue de métaphysique et de morale*, Juillet, 1896.

It is to be noted, in the second place, that Descartes excepted from his universal doubt truths belonging to theology and to the political and moral sciences. Having resolved, then, to doubt everything that his predecessors had taught, he proceeded to draw up *a set of rules* for his further guidance. The logic of the schools, he remarked, will be of little avail in this systematic inquiry, because it is suited rather to the communication than to the discovery of truth. Accordingly, he proposed to substitute for the rules of formal logic the four following principles: (1) To admit nothing as true which is not perceived so clearly and distinctly as to admit of no doubt; (2) to divide, as far as possible, every question into its natural parts; (3) to pass (synthetically) from the easier to the more difficult; (4) to make accurate and complete enumerations, both in seeking middle terms and in considering the elements of difficult problems.¹

These simple and elementary rules are not difficult of observance. They indicate (and this is the point with which we are chiefly concerned) *the essentially deductive nature of the method* which Descartes introduced. Indeed, during the winter of 1619-1620, when Descartes started out to construct a system of knowledge by the aid of these rules, he first applied them to the mathematical sciences, but finding the method to be at once easy and fertile of results, and considering that the principles of all sciences are derived from first philosophy, he determined to apply to all branches of physical and philosophical science the method which he had so successfully used in mathematical studies. Descartes' own statements preclude all possible doubt as to the deductive nature of his philosophical and scientific method:

Toute ma physique n'est autre chose que géométrie, les mathématiques sont les principaux fondements sur lesquels j'appuie tous mes raisonnements. . . . Apud me omnia sunt mathematica in natura.²

¹ Cf. *Discours de la méthode*, II^{me} partie (*Œuvres choisies*, p. 14).

² Cf. *Lettres*, in Cousin's edition of Descartes' *Works*, VII, 121, and *Règles*, etc., *passim*.

Starting Point. The plan conceived during the winter of 1619–1620 — that, namely, of applying to all branches of knowledge the mathematical method, which *starts from an intuition and proceeds by deduction* — was perfected in the *Discourse on Method*, which appeared in 1637, and in the *Meditations*, published in 1641. In these treatises Descartes attempts to discover an incontrovertible truth (*aliquid inconcussum*), known to us by a clear and distinct intuition, and from that single truth to deduce all science. The truth which he discovers to be beyond all possibility of doubt, and which he accordingly selects as the beginning of all scientific knowledge, is the fact of his own conscious thought. I may doubt, he observes, about everything else, but I cannot doubt that *I think*, for to doubt is to think. But if I think, I exist; “*Cogito, ergo sum.*”¹ ✓

To this Gassendi objected that one may infer existence from any external action, such as walking, and argue *Ambulo, ergo sum*. But Descartes protested that the *ergo sum* is not an inference, as indeed it cannot be if *Cogito* is the *first* truth; it is, however, evident that Descartes himself, by the use of the word *ergo*, gave rise to the misunderstanding. The complex proposition, therefore, “*Cogito, ergo sum,*” merely expresses the undeniable certainty of the self-evident intuition that I think, and of the equally self-evident intuition that I exist. No doubt Descartes selected *thought* rather than an external action, such as walking, because, though I may be deceived as to whether I am walking or not, I cannot be deceived as to whether I am thinking. He felt, too, that *thought* in some way implies *existence*, and he had, perhaps, in mind St. Augustine’s *Quod si fallor, sum*; he does not, however, appear to have realized the difference between an indirect argument such as St. Augustine’s was — merely a *reductio ad absurdum* of an opponent’s contention — and a direct proof or demonstration.

¹ Cf. *Discours*, IV^{me} partie (*Œuvres choisies*, p. 25); also *I^{re} Méditation*, *op. cit.*, p. 79.

Descartes might have turned, at this point, to the consideration of matter or extension ; he might have considered that we have a clear and distinct idea of extension, which is as primitive and underived as is our idea of thought and thinking-subject ; but instead of doing this he proceeded, like the mathematician that he was, to deduce all knowable truth from the fewest possible premises. He passed, therefore, deductively, from his own existence to the existence of God, and from the existence of God to the existence of extended matter (external world).

The Existence of God. Descartes reduces his proofs of the existence of God to two :¹ the *a posteriori* argument from effect to cause, and the *a priori* argument, which proceeds from the idea of God to the existence of God. We take up first the *a posteriori* argument.

Having established the truth that I think and that therefore I exist, Descartes goes on, in the *Third Meditation*, to argue deductively as follows : Of the ideas which I find in my mind, some arise from external causes, and others from the mind itself. Now, among the ideas which I possess is the idea of God, that is, the idea of a most perfect Being. This idea, however, cannot have been produced by me ; for the fact that I doubt proves that I am an imperfect being, and an imperfect being cannot cause that which is most perfect. He alone Who is Himself endowed with all perfection can produce in my mind the idea of a most perfect Being. Therefore, from the idea of God which I possess, I am warranted in concluding that God exists.²

The existence of God is, then, not an intuitive truth, but rather a truth inferred from an intuition of the contents of the mind. The most serious flaw in Descartes' *a posteriori* argument is *the assumption of the principle of causality*. Descartes,

¹ Cf. *Réponses aux premières objections*, op. cit., p. 146. Elsewhere (*Œuvres*, ed. Cousin, IX, 164) Descartes enumerates three proofs.

² *Œuvres choisies*, p. 103.

it must be remembered, has resolved to doubt about everything, and up to this point he has established merely the truth that he thinks and that he exists. He has no right, therefore, to assume the principle of causality, in virtue of which it is affirmed that whatever perfection is in the effect must be also in the cause. If he assumes it in virtue of clear and distinct perception, he must abandon the attempt to deduce all truth from *one* intuition. Apart from this flaw, which may be called accidental, the argument is intrinsically invalid. It is not true that an idea cannot contain representatively a perfection which is neither formally nor eminently in the mind that conceives the idea. I may form in my mind an idea of the Infinite without possessing the perfections which the idea of the Infinite represents. The principle that the effect is not greater than the sum of its causes, is true in the order of being; but in the argument which we are studying, the effect is in the order of representation, while the cause is in the order of existence, and *the transition from the ideal order to the real order is always fallacious*.

We next come to the *a priori*, or, as Descartes calls it, the *geometrical proof of the existence of God*. We find in our minds certain ideas possessing properties so fixed and immutable that we cannot acquire such ideas without holding to the truth of the properties which are necessarily connected with them. We cannot, for example, possess the idea of a triangle, and understand what the idea means, without admitting that the sum of the angles of a triangle is equal to two right angles. Now, when we examine the idea of God we find that it is the idea of the most perfect Being, an idea, namely, which comprises all perfections, including that of existence. If existence were not comprised among the perfections of God, He would not be the most perfect Being. Therefore, from the fact that we possess the idea of a supremely perfect Being we are warranted in concluding that such a Being exists. The argument may be stated in Scholastic form and phraseology thus:

Ens, de cujus essentia est existentia, necessario existit: Atqui Deus est ens de cujus essentia est existentia; ergo Deus necessario existit.¹

Descartes' geometrical or ontological argument raised a perfect tempest of controversy. It was attacked on all sides as being a mere restatement of St. Anselm's argument, as containing an illogical transition from the ideal to the real order, and as *falsely assuming that existence is a perfection*. Despite these objections, the argument gained many supporters, and remained in honor among the Cartesians of the seventeenth and eighteenth centuries.

Having thus demonstrated the existence of God, Descartes next proceeds to infer from the goodness and wisdom of God the veracity of the faculties of the human mind, and to build on this basis the whole superstructure of philosophy. The *circulus vitiosus* is flagrant: Descartes *proves* the existence of God and then from the veracity of God infers the reliableness of the cognitive powers by which the existence of God has been established.

If, Descartes proceeds to argue, our faculties of knowledge are reliable, our senses are to be believed when they testify to the existence of the external world. The existence of material extended being is not known therefore by *intuition*, but rather by way of inference from the primitive intuition of my own existence and from the truths deduced therefrom.

Doctrine of Two Substances. By direct intuition, then, we know that there is a thinking substance, *self*, and by inference we know that there is an extended substance, *matter*. Now, substance being that which so exists as to need nothing else for its existence (*res quæ ita existit ut nulla alia re indigeat ad existendum*), it is clear that God alone is, properly and strictly speaking, a substance. Mind, however, and matter, since they need nothing for their existence except the coöperation of God,

¹ Cf. *Revue de métaphysique et de morale*, Juillet, 1896, p. 436. The argument is found in the *I^{me} Méd.*, *Œuvres Choiesies*, p. 120.

may be called created substances. *The essence of mind is thought; the essence of matter is extension.* Everything that may be predicated of mind is a mode of thought, while everything that may be predicated of matter is a mode of extension. Mind and matter, therefore, are *antithetical*.¹ It remains to see how Descartes applied this doctrine of dualism to his concept of nature and to anthropology. But before taking up Descartes' philosophy of nature, it will be convenient to gather from the foregoing doctrines the principles of Descartes' epistemology.

Descartes' Epistemology. When Descartes makes the veracity of God the all-sufficient guarantee for the reliability of our sense processes and of our thought processes, he lays down a principle which he wishes to be regarded as the ultimate metaphysical basis of certitude. But in every system of epistemology principles of psychology are implied, and we may ask, for example, by what quality is the knowledge which comes from the outside world to be distinguished from the knowledge which comes from the world within us? How can I distinguish the *idea of a thing* from the *idea of a mere mental fancy*? How, for instance, does my idea of Julius Cæsar differ from my idea of Aladdin? Descartes would answer that the mind, being a *res cogitans*, a substance whose very essence is thought, must be conscious of all its acts. When, therefore, I am conscious of an idea which I myself formed (*idea a meipso facta*) I am conscious of having formed it; but when an idea comes to me from outside (*idea adventitia*), I am conscious of the non-interference of my will, and I know that, whether I will it or not, the idea represents so much and no more. Ideas of this latter class must, therefore, be caused by something outside the mind, and I conclude that the something-outside-the-mind exists. Descartes is, then, a *reasoned realist*.

Descartes maintains the existence of real substance as well as of real qualities; for, if qualities exist, substances exist, si

¹ Cf. *1^{re} Méd.*, *op. cit.*, p. 126.

nothing can have no qualities (*Nihili nulla sunt attributa*). Thus in the *Principia Philosophiæ*¹ he writes: "Ex hoc quod aliquod attributum adesse percipiamus concludimus aliquam adesse rem existentem sive substantiam cui illud tribui possit." Still, he teaches that the secondary qualities, taste, color, etc., of material things, are modes of consciousness rather than qualities of real substances. There are, indeed, movements of real substances, which movements, on being communicated to the nerves or filaments, are conducted to the pineal gland, where they come in contact with the mind and are perceived by it. It is not, however, the movement of the substance in the world outside us that is perceived by the mind, but merely the movement of the filaments, which is caused by the movement of the external substance. There is, then, a real cause of color, taste, etc.; nevertheless, color, taste, etc., being only modes of the subjective organism, are, strictly speaking, states of *self* rather than states of *not-self*. By this doctrine of *subjectivism* Descartes paved the way for the idealism of subsequent philosophers. It was easy for Berkeley, for example, to reason away the primary qualities of matter by reducing them, as Descartes had reduced the secondary qualities, to states of *self*, and to conclude that the very substance of matter has no existence except in thought. Descartes, it must be remembered, is not an idealist; he maintains the existence of an external world of matter with its qualities, extension and motion; nevertheless, he is justly regarded as the founder of modern idealism.

Philosophy of Nature. What is the essence of material substance? Descartes, as we have seen, answered that it is *extension*. The secondary qualities are merely states of the perceiving mind, and among the primary qualities extension alone is so essential to matter that without it matter is unthinkable. Now, from extension proceed the divisibility, figurability, and mobility of matter. Of course, the principle that matter is

¹ II, 52.

nothing but extension would, if pushed to its logical conclusions, lead to subjectivism. Descartes taught, as is well known, that the *essences of things depend on the will of God*. Now, the Divine Will is immutable; matter, having at its creation been endowed with a certain measure of motion and rest, retains this measure unchanged.¹ Hence the *laws of motion*: Everything tends to continue in the state of rest or of motion in which it is, and changes that state only as a result of the interference of some extraneous cause. Thus Descartes' notion of matter harmonized with subsequent discoveries. He himself inferred from his notion of matter the homogeneousness of space, the existence of substance in the interstellar spaces, the formation of the universe from a primitively homogeneous mass, the explanation of the distinction between solid and fluid bodies, and so forth. The only thing that extension confers on matter is mobility; *matter is essentially inert*, and receives its motion from the first efficient cause.

Descartes devotes special attention to the application of his mechanical concept of nature to *dioptrics*. He discards the entire Scholastic system of forms, accidental and substantial, entitative (accounting for the qualities of things) and representative (accounting for our knowledge of things), and explains the phenomena of light, color, vision, and so forth in terms of motion. All sensations, he teaches, including that of light, are accounted for by the motion of particles; light itself is a motion — not, indeed, a vibration (Descartes did not advance so far as this) but a horizontal pushing of one particle by another. It is needless to remark that, long before the days of Descartes, Aristotle denied the emission theory of light and held that light is a mode of motion. Descartes, however, advanced beyond all his predecessors when he taught² that the difference of one color from another is due to the varying velocities with which the motions of light reach the eye. Not less interesting is the portion of

¹ *Op. cit.*, III, 47.

² *Mémoires*, VIII^{me} Discours.

the *Dioptric* (Sixth Discourse) in which he anticipates many of Berkeley's contributions to the theory of vision.

Psychology. It is in Descartes' psychology that the disastrous consequences of his doctrine of the two substances appear. If mind and matter are so opposed as to have nothing in common, the *union of soul and body* in man must be merely a *mechanical* one. The body, Descartes teaches, is a machine, so constructed that it carries on its own operations by virtue of the impulse received from the soul, which Descartes locates in the pineal gland. This portion of the brain is selected as the seat of the soul because it is the only part of the cerebral substance which is not double, and it is evident, Descartes observes, that if the organ of the soul were double, we should perceive two objects instead of one.

It is important to note that Descartes attaches to the word *mind* a meaning which is at once narrower than that of the word *soul* and wider than that of the expression *thinking faculty*. He defines mind as *res cogitans*; but he includes under the term *thought* sensation, imagination, and volition as well as the processes of ideation; thought, in fact, he makes synonymous with states of consciousness. Thought, however, does not include all the vital functions.¹

In his account of the physiological processes of the body, as well as in his doctrine regarding sensation, Descartes has recourse to the theory of *animal spirits*. The only physiological principles which he admits are motion and warmth. God, he observes, has placed in the hearts of men and animals a vital warmth which promotes the circulation of the blood² and separates from the blood its finest and most mobile particles, which constitute the animal spirits (*spiritus animales*). This fluid ("very subtle wind," as he sometimes calls it) conveys the stimulation of

¹ *Principia Philosophiae*, I, 9.

² Descartes mentions in terms of praise Harvey's *De Motu Cordis et Sanguinis in Animalibus* (1628).

the senses to the pineal gland, and, returning through the nerves to the muscles, conveys the impulse of motion from the pineal gland to the limbs. *In animals there is no conscious sensation* but only this automatic response of the animal mechanism to stimuli; so that when an animal on the dissecting table utters what is apparently a cry of pain, the noise is, as the Cartesian vivisectionists contended, merely the crash of broken machinery. In man, however, the motion of the animal spirits, on reaching the pineal gland, enters into the region of thought, and thus there arises a *passio*. In the same way, the motion imparted by the mind from the pineal gland leaves the region of thought and is an *actio*. Hence, the contents of the human mind (*cogitationes*) are divided into *actiones* and *passiones*. Descartes, however, does not maintain this distinction in the details of his account of the contents of the human mind.

With regard to the origin of ideas, Descartes at one time held a threefold classification of ideas, namely *innatæ*, *adventitiæ*, and *a meipso factæ*. He saw fit, however, at a later period, to explain that by innate ideas he meant merely natural dispositions of the mind which enable it to develop certain ideas. "In the same sense," he observes in his answer to Regius,¹ "we say that certain illnesses are innate in certain families, by which we mean merely that children are born with a disposition for developing those illnesses." None of our ideas, therefore, are actually innate. All our ideas are either occasioned by our sensations, that is, they come, apparently at least, from the world outside and are therefore called *adventitiæ*, or result from voluntary combinations of elements of thought, and hence are called *idea a meipso factæ*. Besides these two classes, we must distinguish the innate dispositions to develop certain ideas, and these dispositions we may describe as innate potencies of ideas.

Descartes contrasts *will* with mind. The mind is essentially limited, while the will is unlimited. We are directly and

¹ Cousin's edition, X, 70.

immediately conscious of our power to perform or to omit certain actions, and in this power *freedom* consists.¹ From the freedom of will comes the power of choosing to assert that which we do not understand. The will is, therefore, the source of error.

The *passions of the soul* form, as we have seen, the subject of a special treatise by Descartes. *Passion*, like every other state of consciousness, *is a thought*: it is not a state of the body, for every state of the body is either a figure or a movement. Still it is occasioned by the body, for it arises in the following manner. When an impression is conveyed to the brain, the animal spirits are disturbed and the commotion thus produced results in approach or flight or attitude of defense. Now, in the lower animals, this is all that takes place. But in the case of man, the mind perceives this commotion of the animal spirits, and the thought of the commotion is emotion, or passion. Passion, therefore, is a specifically human phenomenon.² According to Descartes, the primitive emotions are six in number: *admiratio*, *amor*, *odium*, *cupiditas* (désir), *gaudium*, and *tristitia*.

The consideration of the emotions leads us to the next and last division of Descartes' philosophy, namely, his ethical doctrines.

Ethical Doctrines. Descartes did not attempt to elaborate a system of ethics from the principles of his speculative philosophy. In his *Letters*, and especially in those addressed to Princess Elizabeth, daughter of Frederick V of the Palatinate, and in those written to Queen Christina, he lays down certain ethical principles which betray the influence of the Stoics. The *highest happiness*, he teaches, is to be attained by striving for a knowledge of what is right and by cultivating the will in order to strengthen it in its resolve to do what is right. Knowledge of God as the author of all things, knowledge of the universe as infinite in magnitude, knowledge of the soul as distinct from the body, and knowledge of self as part of the domestic and civil society, — these are the greatest aids to the attainment of virtue and

¹ *IVme Méd.*

² Cf. Mahaffy, *Descartes*, p. 184.

happiness. We should realize the unlimited power of the will; for from this feeling of power springs the virtue of *magnanimity*, which is the foundation of all other virtues.¹

Historical Position. Descartes exercised a profound influence on his own and subsequent generations. He stirred the thinking world of his time to its very depths. His doctrines left their impress on the theology, science, and literature, as well as on the philosophy of the seventeenth century. His philosophy was adopted and defended by religious orders. He had for patron the Prince of Condé, the ablest general of the age, and such was the greatness of his fame that more than one royal personage sought admission to the ranks of his pupils. All this enthusiasm produced, however, a natural reaction against his teachings. His works were placed on the Index *donec corrigantur* (November 20, 1663), the Calvinist universities in Holland proscribed his writings, and the University of Oxford forbade the teaching of his philosophy.² But in spite of all opposition, Descartes' influence continued, and it is hardly an exaggeration to say that his thought determined the whole course of the development of modern philosophy.

Descartes' philosophy is original in *form* rather than in *content*. His most noteworthy contribution to philosophy is his method. This method is, as we have seen, essentially mathematical, the very opposite of what is known as the scientific method. Yet, by a strange irony of fate, physical science owes more to Descartes than to Bacon, who sought to reform the sciences by the introduction of the inductive in lieu of the syllogistic process.

Descartes has been compared to Socrates, and indeed he is, in a sense, the Socrates of modern thought. He called attention, as Socrates had done, to the necessity of studying the nature of thought and the conditions of knowledge. But, unfortunately for the subsequent development of philosophy,

¹ Cf. Höffding, *Hist. of Mod. Phil.*, I, 240, 241.

² Cf. González, *op. cit.*, III, 239.

he did not base his system of psychology on experience. All his psychological inquiry was vitiated by his preconceived doctrine of the absolute antithesis of mind and matter, a doctrine which, by creating an imaginary chasm between subject and object, undid all that Socrates, Aristotle, and the schoolmen had accomplished. This doctrine is the luckless legacy of Cartesianism to modern thought, for "how to bridge the (imaginary) chasm between mind and matter" came to be the problem which almost every great philosopher since Descartes' time has striven in vain to solve.

From this *fundamental misconception of the relation between mind and matter* followed a complete misunderstanding of the purpose of philosophical inquiry. After Descartes, philosophy once more becomes anthropocentric, — it reduces itself to the study of individual consciousness, to a geometry of deductions from internal experience; and the objective world, its origin, plan, and destiny, the place of man in nature, and even the existence of an intelligent first cause, are all made secondary subjects of inquiry, to be decided according to the result of the study of our own consciousness. This inversion of the natural perspective is what a modern writer has characterized as the "topsy-turveydom of Cartesianism."

To Descartes, too, may be traced the misunderstanding which prevails between those who believe in the spirituality of the human soul and those who rightly insist on the value of experimental methods in the study of psychic phenomena. For the *concrete dualistic spiritualism* of Aristotle and the schoolmen Descartes substituted the *absolute dualistic spiritualism* of Plato, thereby establishing at the outset of the modern period an altogether unnecessary antagonism between spiritualism and empiricism — an antagonism which eventually drove the empirical psychologist to adopt the materialistic concept of the soul as the only concept which justified the study of the correlation between psychic phenomena and physiological processes.

CHAPTER LV

CARTESIANISM

Toward the end of the seventeenth century almost every French writer of note evinced a more or less decided tendency towards Cartesianism. **Bossuet** (1627–1704) and **Fénelon** (1651–1715) presented the traditional religious philosophy of St. Thomas and St. Augustine, in a form which bears unmistakable marks of the influence of Descartes' teachings. Among the Port-Royalists Cartesianism found ardent defenders in **Arnault** (1612–1694) and **Nicole** (1625–1695). **Pascal**, too, while he, no doubt, included Cartesianism in his condemnation of all purely rational philosophy, represents in his own doctrines a development of ideas which were germinally contained in the philosophy of Descartes. Finally **Geulincx** and **Malebranche** gave to Descartes' philosophy a more complete and definite form, and brought to light the elements of occasionalism and ontologism latent in it.

Blaise Pascal (1623–1662) was born at Clermont, in Auvergne, and was educated at Paris. He became one of the most conspicuous figures in the Jansenist movement, and contributed to the literature of the Jansenist controversy the famous *Provincial Letters* (*Lettres provinciales*). He made several important discoveries in mathematics and physics, and it was a treatise of his that formed the basis of *The Port-Royal Logic* (*L'art de penser*), which appeared in 1662. The work entitled *Pensées*, published in 1669, consists of fragmentary reflections intended to form part of a system of Christian philosophy. Some of these fragments are utterly sceptical in tone, while others breathe the spirit of dogmatic Stoicism. And, in point of fact, the fundamental thought in Pascal's mind reconciled both these extremes; for while he depreciates reason and condemns all purely rational philosophy, at the same time he exalts faith and insists that "the heart has reasons of which reason itself knows

nothing." From the point of view of reason and philosophy, *man is an eternal enigma*, truly great, yet no less truly miserable. "Man knows that he is miserable: he is therefore miserable, since he is so; but he is very great, since he knows it. . . . If he exalts himself, I abase him: if he abases himself, I exalt him, and perpetually contradict him till he comprehends that he is an incomprehensible monster." *Reason*, therefore, cannot solve the mystery of man's state, nor can it discover the cause of his present condition, which is that of a king deposed. *Faith* alone, by means of the doctrine of original sin, answers the questions which reason can merely ask, and solves the riddle of human destiny. On regeneration by the redemption of Jesus Christ is the whole fabric of morality to be based. Consequently, faith, or as Pascal commonly expresses it, feeling, sentiment, the heart, is the supreme criterion of the highest truths in the speculative order, and of all moral truth.

GEULINCX

Life. Arnold Geulincx was born at Antwerp in the year 1625. After having studied and taught philosophy at Louvain, he went to Leyden, where he joined the Calvinists. At the University of Leyden he was appointed successively lector (1662) and professor extraordinary (1665) in the department of philosophy. He died at Leyden in the year 1669.

DOCTRINES

Geulincx¹ developed the *ontologism* and *occasionalism* which were latent in the Cartesian separation of mind and matter, and in the Cartesian principle that matter is essentially inert.

Ontologism. Unless I know how an event happens I am not its cause: *quod nescis quomodo fiat, id non facis*. Now, I am

¹ On Geulincx and Malebranche, cf. Damiron, *Essai sur l'histoire de la philosophie en France au 17^{me} siècle* (Paris, 1846). Recent edition of Geulincx' works by J. P. N. Land (The Hague, 1891-1893).

ignorant of the manner in which a sense-stimulus passes into, or becomes a sensation in, the mind. Therefore *I* do not cause the sensation. Neither does the body cause it; for the body is essentially inert, unconscious, non-rational. Consequently, the sensation — and what is true of sensation is true of all knowledge — is caused by God Himself, the body and the bodily stimulus being merely the *occasions* of the conscious act.

Occasionalism. Similarly, I have no consciousness of the manner in which my volitions effect movements of my own body or of external things. It is not *I*, therefore, who produce these movements, but God, Who by divine decree (*instituto quodam decretoque divino*) ordained that material things should be the *occasions* of effects which He alone produces.

Ethical Doctrines. From these speculative principles Geulincx deduces certain ethical doctrines. He assumes that where *I* can do nothing *I* ought not to will anything (*ubi nihil vales, ibi nihil velis*). It is my duty, therefore, to renounce the world and all worldly motives of action, to retire within myself and cultivate, in humility and patience, the supreme virtue which is *love of God and of reason* (*amor Dei ac rationis*). In this system of conduct the hierarchical idea is not happiness, but duty.

MALEBRANCHE

Life. Nicolas Malebranche was born at Paris in 1638. In 1660 he entered the Paris house of the Oratory founded by St. Philip Neri. Four years later, the reading of Descartes' *Traité de l'homme*¹ decided his philosophical vocation, and during the rest of his life he devoted himself as strenuously as his feeble health would permit to the elucidation and development of the Cartesian philosophy. He died in 1715. His most important work is *Recherche de la vérité*, which appeared in 1675.²

¹ *La traité de l'homme ou de la formation du fœtus* (Paris, 1664).

² Cf. Henri Joly, *Malebranche* (*Grands Philosophes* series, Paris, 1901). Recent edition of Malebranche's works by Jules Simon (Paris, 1871).

DOCTRINES

Malebranche begins his search for truth by an inquiry into the *causes of error*. The principal source of error he finds to be belief in the trustworthiness of the senses; for the senses were given us to serve practical needs, and not for the purpose of revealing the natures of things. The external senses err in representing bodies as colored, etc., extension being the only quality which bodies possess. Similarly, the imagination deceives us; for its impressions come through the body. There is nothing left, then, but to trust in our ideas as representations of reality. But whence come our ideas? Not from external things; because no finite thing can produce anything, causal efficacy being the prerogative of the Deity (*occasionalism*). Indeed, all true philosophy, Malebranche observes, must teach that there is but one cause, just as all true religion must teach that there is but one God. Now, if finite being can produce nothing, and if God is the only cause, the conclusion is obvious that it is God Himself Who produces our ideas. In Him we see all things (*ontologism*): “nous voyons toutes choses en Dieu.” He is the locus of our ideas; He is, therefore, in immediate relation with every thinking soul. What, then, one asks, has become of the soul itself? It is reduced to a mere *thought*; the soul *always thinks*, and thought is its being and its life.

Historical Position. Pascal, Geulincx, and Malebranche brought to the surface the elements of mysticism which lay hidden in Descartes' system of thought. The latter two developed also the latent ontologism and occasionalism of the Cartesian philosophy, and revealed the logical nexus between Cartesianism and pantheism. For, although Malebranche protested against the pantheism of “le misérable Spinoza,” posterity has rightly pronounced his occasionalism to be Spinozism in the stage of arrested development — pantheism held in check by faith in Christian revelation.

CHAPTER LVI

SPINOZA

Life. Baruch (Benedict) Spinoza was born in 1632 at Amsterdam, where his parents, who were Portuguese Jews, had sought refuge from religious persecution. He received his early education in the Jewish academy at Amsterdam; later, he studied natural science under the tuition of a free-thinking physician named Van den Ende, and was initiated into the mysteries of Talmudic literature and philosophy by the Rabbi Morteira. In 1656 he was solemnly excommunicated by the Synagogue on account of his heterodox views and obliged to leave his native city. After a few years spent at Rhynsburg and Voorburg, he repaired, in 1669, to The Hague, where he earned his livelihood by polishing lenses. In 1673 he declined the offer of a professorship at Heidelberg, preferring the quiet and independence of the humble life which he had elected to lead. He chose poverty for his lot, and when he died, in 1677, his worldly possessions were barely sufficient to pay a few trivial debts which he had contracted during his illness.

Sources. The principal philosophical works of Spinoza are *De Intellectus Emendatione*, *Ethica Ordine Geometrico Demonstrata*, *Tractatus Politicus*, *Tractatus Theologico-politicus*, *Principia Philosophiæ Cartesianæ* (in geometrical form), *Cogitata Metaphysica*, and a *Short Treatise on God and Man* (written in Dutch). The best edition of Spinoza's works is that of Van Vloten and Land (The Hague, 1882-1883, in 2 vols; reprinted, 1895, in 3 vols.), Pollock's *Spinoza, his Life and Philosophy* (London, 1880), and Principal Caird's *Spinoza (Blackwood's Philosophical Classics*, Edinburgh and Philadelphia, 1888), are excellent introductions to the philosophy of Spinoza.¹ The *Ethica* was translated by White (London, 1883) and by Elwes (London, 1883-1884).

DOCTRINES

Spinoza's Idea of Philosophy. It will be impossible to arrive at a definite idea of Spinoza's system or to reconcile the widely divergent interpretations of his philosophy, unless we first inquire

also Martineau, *A Study of Spinoza* (London, 1882), *Types of Ethical* ord, 1886), and articles on Spinoza in the *Encyc. Brit.* and in the *peculative Philosophy*, Vols. XI and XVI.

into *the motive which actuated him* in his philosophical speculations, and try to discover the point of view from which he looked out on the world of life and thought. In the treatise *De Intellectus Emendatione* he gives us a kind of mental autobiography and tells us that his aim in philosophy is to seek the knowledge which makes men happy. His thought, therefore, is not set in motion by a problem of causality; nor is he interested in the question of the value of knowledge; but he is troubled at the unrest, of which the whole world is full, and he approaches the problems of philosophy in the ethical rather than in the scientific spirit, with the hope of leading his reader to look upon things in that aspect of them which shall conduce to greater spiritual and moral perfection. This is the significance of the title *Ethica*, by which he designated his great metaphysical treatise.

To this *ethical aim* of his philosophy Spinoza subordinated everything else, even logical consistency and systematic coherency, causing to converge in one channel of thought Cartesianism, the pantheism of Bruno and Maimonides, and the mysticism of the Neo-Platonists and the cabalistic philosophers.

Starting Point; Definitions. Spinoza's method is even more formally and technically mathematical than that of Descartes. The *Ethica* starts with definitions and axioms, and proceeds, by a process of syllogistic proof, to the establishment of propositions and corollaries.

Spinoza defines *substance* as follows (def. III):

Per substantiam intelligo id quod in se est et per se concipitur: hoc est id cujus conceptus non indiget conceptu alterius rei a quo formari debeat.

And here, whatever view we may take as to the preponderance of Descartes' influence on Spinoza's mind, we cannot fail to observe that Spinoza's definition is but an interpretation of the ambiguous words in which Descartes defined substance: "*Res quæ ita existit, ut nulla alia re indigeat ad existendum.*"

Spinoza next proceeds to define *attribute*: "Per attributum intelligo id quod intellectus de substantia percipit tamquam ejusdem essentiam constituens" (def. IV). In the following definition (def. V) he describes *mode*: "Per modum intelligo substantiæ affectiones, sive id quod in alio est, per quod etiam concipitur."

Substance. Substance, attribute, and mode are the cardinal ideas in Spinoza's system of thought. Having defined them, therefore, he proceeds to show from the definitions:

(a) That substance is one, infinite (prop. VIII), and indivisible (prop. XII).

(b) That the one substance is God (prop. XIV). Now, God is defined (def. VI) as "Ens absolute infinitum, hoc est substantia constans infinitis attributis quorum unumquodque æternam et infinitam essentiam exprimit." God is, then, an infinity of infinities; and, although an attribute, such as thought, or a mode, such as space, may be infinite, God alone is infinite in the infinity of his infinite attributes: they are infinite in one respect; he is infinite in all respects.

The Existence of God is a necessary truth. In proof of this Spinoza advances the argument that God is substance, and substance must exist (prop. VII); for, not depending on anything else for its existence, it must cause itself, and therefore its essence must contain existence. In the second place, Spinoza (prop. XI) advances in proof of the existence of God an argument of which the following is the major premise: "Id necessario existit cujus nulla ratio vel causa datur quæ impedit quominus existat." He then proceeds to argue that neither in the Divine Nature nor outside it is there any cause which could prevent the existence of God. The argument, as is evident, is guilty of the fallacy of passing from the order of ideas to the order of existence and merely proves the self-evident truth that *if* God exists, existence is a necessary attribute of the Divinity. Thirdly, Spinoza advances the following proof of the existence of God:

Posse non existere impotentia est, et, contra, posse existere potentia est (ut per se notum). Si itaque id quod jam necessario existit non nisi entia finita sunt, sunt ergo entia finita potentiora Ente absolute infinito. Atqui hoc (ut per se notum) absurdum est. Ergo vel nihil existit, vel Ens absolute infinitum necessario etiam existit. Atqui nos vel in nobis vel in alio quod necessario existit existimus. Ergo Ens absolute infinitum, hoc est (per def. VI) Deus, necessario existit.

In a scholion appended to this argument Spinoza, after calling attention to the apparently a *posteriori* form of the proof, remarks that in reality we do not argue from the existence of the finite to that of the infinite, that the conviction that God exists is based, not on the reality of the finite, but rather on the unreality, that is, on the imperfection, of all finite being. For, the more perfect a substance is, the more reality it possesses.

God is the Only Substance (prop. XIV). Whatever is, is in God (prop. XV). It follows (prop. XVIII) that God is the *immanent*, not the *transient*, cause of all finite existence. It remains, therefore, for us to find in His unity that from which the differences of things are derived. This Spinoza attempts to do by means of the doctrine of *attributes* and *modes*.

Attributes of the Divine Substance. The first determination of the infinite is by means of the attributes *thought* and *extension*. God is, indeed, an infinity of attributes; *thought* and *extension* are merely the two attributes under which the human mind is capable of representing Him. Instead, therefore, of Descartes' doctrine of the antithesis of the substance of mind to the substance of matter, we have the doctrine of one substance conceived under the antithetical attributes, *thought* and *extension*. For *thought* is merely one way of looking at God, and *extension* another; so that when I say *Deus est res cogitans* and *Deus est res extensa*, I am speaking of one and the same reality conceived in two different ways. The attributes, therefore, are not ways in which God determines Himself, but rather ways in which we determine Him,¹ and consequently the first attempt

¹ Cf. *Epistola* XXVI.

to find in the one the reason of the difference of the many is a failure. Indeed, Spinoza, if he were consistent, should have ended where he began, namely, at the definition of the one substance, and never have even attempted to derive the many from the one. Not deterred, however, by his first failure, Spinoza in his doctrine of modes renews the attempt to find a derivation of the finite from the infinite.

Modes of the Divine Substance. The attributes were never, it seems, intended to mean finite being; for the character of independence (*per se concipi*) belongs to attribute, as it does to substance; but the mode, which can neither exist nor be conceived without substance (def. V), is surely finite, and here, if anywhere, we shall find the derivation of the finite from the infinite. For modes are, apparently, the countless parts into which the divine substance is sundered, the numberless billows which the ocean of eternal being casts up from its unfathomed depths.

It is only in so far as God is determined to particular modes of being that He can be said to cause them. My body is caused by God inasmuch as it is a determination of Him; so, too, is my soul; so also are the various objects in the world around me. When, therefore, I ask, Are these modes identical with God? Am I God? I must answer that I am not God, for He is infinite and I am determined to this particular mode; but take away the determination of my mode of being, and I am God. In this sense we are *diminished Gods*. There are, therefore, two ways of viewing concrete finite things: first, as they are determined in time and space; and secondly, *sub specie æternitatis*, that is, prescinding from all determination and looking at things merely as flowing necessarily from the divine substance.

(a) We are now in a position to ask, *Is Spinoza a pantheist?* for the answer to this question will depend on the answer to this other question, Does Spinoza hold that finite things, as such, at all, that the modes have any existence apart from the

substance, that they determine the substance in the sense of a real determination? Spinoza¹ expressly teaches that *nothing proceeds from the infinite except the infinite*. Are the modes then infinite, since they come from the infinite? He answers that the modes come from God *inasmuch as (quatenus)* God is modified by finite modes, and may, therefore, be finite. This, however, is merely a subterfuge. The real answer is given when, on the ground that all determination is negation, all limit is not-being, Spinoza finally denies that the mode is real. The senses, it is true, present the world to us as consisting of finite beings really determined and distinct from one another and from the infinite; yet, if we view things *sub specie æternitatis* and reflect that *all determination is negation*, then all distinction and all finiteness disappear, and we find that we have returned to the starting point, to the assertion, namely, that God is one and all is God. We may, indeed, distinguish between *natura naturans*, which is substance absolutely devoid of determination — the indivisible one — and *natura naturata*, which is substance infinitely modified and determined to an infinity of modes of being. But the distinction dissolves when we reflect that determination is negation, and that consequently the sum of all determinations is equal to nothing. We may therefore maintain the formula: *substance = God = nature*.²

It is clear, now, that the mode is as unreal as the attribute, and that substance evades all attempts at differentiation and determination. We can see how things lead up to substance, but we cannot see how they are derived from it. The substance, which is the central concept in Spinoza's system of thought, has been compared to the lion's den, whither many tracks lead, but whence none can be seen to return.

(b) *The self-maintaining impulse*. Spinoza once more renews the attempt to derive the finite from the infinite, when³ he describes the finite as only partly negative (*ex parte negatio*).

¹ *Ethica*, II, 28, schol.

² Cf. *op. cit.*, I, 19, schol.

³ *Op. cit.*, I, 8, schol.

There is, then, in the finite a positive element which, when we come to examine it, we find to be a self-maintaining impulse, an effort (*conatus*), by which it seeks to preserve its existence. In *Ethica*, III, 6, this impulse is said to be *the essence of finite being*. But here, once more, when we ask how this positive element is related to the substance, Spinoza is obliged to answer that it is a determination of God.¹ We are, therefore, thrown back on the monism with which we started: there is no being but God.

(c) *Description of the infinite.* Abandoning now all attempt at deriving the many from the one, let us inquire with Spinoza into the nature of the one substance. We must not expect to define it; for to define is to determine. We may, however, describe it by predicating terms of it *analogously*, as the schoolmen would say. It is, for example, a *cause*, not in the sense in which fire is a cause of heat, but rather in the sense in which the blackboard may be said to be the cause of the figures which limit, or determine, portions of its surface. The one substance may be said to be *eternal*, in the sense that its essence involves existence, or, to use Spinoza's peculiar phraseology, in the sense that it is the cause of itself. But what surprises us most in Spinoza's description of the one substance, is the assertion that it possesses neither intellect nor will, these being determinations belonging to *natura naturata*.² It is evident, therefore, that the infinite is a *geometrical* rather than a *dynamic* infinite, that there is in it no principle of freedom or finality, that all things proceed from it by necessary and immutable law, just as the properties of a triangle (to use Spinoza's favorite illustration) proceed from the nature of the triangle. God is not a self-determining, self-integrating spirit, but an inert, impersonal substance.

Philosophy of the Finite. The first determinations of substance are, as we have seen, mind and matter, or substance conceived as thinking and substance conceived as extended.

¹ *Op. cit.*, II, 45; III, 6.

² *Op. cit.*, I, 32 and corollary.

These attributes, although antithetical and therefore exclusive of interaction, are arranged in a certain parallelism, so that every mode of substance has its thought aspect and its extension aspect. For example, the idea of a circle, and the circle itself are the thought aspect and the extension aspect of one and the same mode of substance. To this *parallelism* we shall return later on. Before taking up the philosophy of mind and the philosophy of matter it is necessary to speak of the infinite modes.

(a) The *infinite modes* are introduced in order to fill up the gap between God and finite modes: as modes, they are finite; as infinite modes, they belong to the sphere of the infinite. These infinite modes¹ are either modifications of the absolute nature of some attribute or modifications of an attribute already modified, but so modified as to be eternal and infinite. When asked for examples, Spinoza² answers that to the first class belongs infinite intellect as an infinite mode of thought, and motion and rest as infinite modifications of extension; while to the second class belongs the form of the whole universe (*facies totius universi*) which, though it varies in an infinity of ways, is always the same.

This final attempt at mediation between the infinite and the finite is, like all Spinoza's previous attempts in the same direction, a failure. For the modes must, in ultimate analysis, be *either finite or infinite*. The doctrine of infinite modes is, however, interesting by reason of its striking resemblance to the Neo-Platonic *doctrine of the Logos*, which was just such an illogical introduction of a something intermediate between the one and the many. Indeed, Spinoza himself was aware of the resemblance.³ The doctrine is also of interest as showing once more how Spinoza's speculative intuition realized the necessity of introducing into his system some *principle productive of differentiation and plurality*, — a principle which, however, the logic of his system would not and could not admit.

¹ *Op. cit.* I, 21, 22.

² *Ep.* LXVI.

³ *Cf. Short Treatise*, I, 9.

From each of the infinite modes proceeds an infinity of finite modes; from infinite intellect proceed all finite minds, and from infinite extension proceed all finite bodies. We come, therefore, to the philosophy of body and mind.

(b) *Philosophy of body.* Extension is infinite (1) because it is an attribute of God, and (2) because its development could be impeded neither by a mode of thought nor by a mode of extension; and whatever is finite is so because it is in some way impeded in its development. Extension is not only infinite, it is also one and continuous, because (and whatever problem Spinoza happens to be discussing, he always takes us back to this point) substance is one and continuous.) There is, therefore, no substantial, but merely a modal divisibility of extension.¹

Extension is essentially active, not inert, as Descartes taught; for it is, as we have seen, an attribute of substance, and substance, although incapable of self-differentiation, is essentially and eternally active. Every extended mode of substance is, therefore, preceded by and followed by an infinite series of movements. Thus, for the mechanism of Descartes, Spinoza substitutes a dynamism of a peculiar kind, namely, a dynamism based on the eternal activity of the infinite substance, not on the activity of matter itself.²

Particular bodies are systems of movements. The molecules of the living body, for instance, are constantly changing; yet the body remains the same because the same relation continues to exist between the molecules—the set of movements remains the same. But the living body is itself part of a larger system of movements,—of the terrestrial planet, for instance,—and this in turn forms part of a still larger system; so that the isolated individuality of any one body is an illusion of the imagination: a comprehensive view, that is an adequate knowledge of any particular body, reveals it to be but part of the universal system of movements.

¹ *Eth.*, II, 2, 13.

² *Op. cit.*, II, 13, Lemma III.

But whence comes the *order* in this cosmic system of movements? Whence the adaptation of organ to function and of individual to environment? Spinoza has already answered in general terms that in the geometrical process of the finite from the infinite there is no place for the concept of finality. So, too, in the philosophy of body, he teaches that the extension modes of substance proceed from substance as extended not as thinking. There can, therefore, be *no intended adaptation*. The processes of the cosmos proceed by an unconscious geometry, in the same way as the spider spins its web without any knowledge of the proportion and symmetry of figures. It is only by imagination that we distinguish objects, fancy them to be individual, group them in figures, and arrange them so as to produce beauty of form or color. This arrangement was not intended in the processes themselves; so that, if we see beauty and adaptation in the geometrical processes of nature, it is due to the illusions arising from the inadequacy of our knowledge.

(c) *Philosophy of mind*. Spinoza's psychology is partly foreshadowed in his doctrine of substance. Thought, as an infinite attribute of the infinite substance is eternal and necessary; it is the thought *of God by God*. Minds (created minds, as we commonly call them) and ideas are modes of substance under the aspect of thought, just as bodies are modes of substance under the aspect of extension. The order and connection of ideas is already determined by the order and connection of extension modes: *idem est ordo idearum et ordo rerum*.¹ To every thought mode corresponds an extension mode, and this *parallelism*, being universal, implies that everything thinks. Indeed, Spinoza openly teaches that animals, plants, and even inanimate objects think; for the essence of a thing is the self-maintaining impulse, and an impulse is a tendency (*conatus*), and tendency implies thought. Plant thought, however, and animal thought Spinoza confesses to be thought of a very rudimentary kind.

¹ *Op. cit.*, II, 7.

The human mind is, like every other mind, a mode of the divine substance. But what kind of mode? It is defined, in the first place, as *the idea of the body*.¹ We commonly say that man is composed of body and soul. In reality man is substance, determined to that particular mode of extension which we call body, and to that particular mode of thought which is the idea of body, and which we call soul. Body and soul are, therefore, one and the same thing conceived under the aspects of extension and of thought, respectively. It will be observed, however, that although Spinoza reduces the soul to an *idea*, he is far from maintaining with the phenomenalist that the soul has no *substantial reality*; for he maintains that the soul is a mode of the great reality which is the one substance. It will be observed also that since the soul is the idea of the body, or in other words the consciousness of the organic states of the body, the conclusion that we must be aware of everything which takes place in the body, and that consequently every man must be an adept in physiology, appears at first sight inevitable. Spinoza, wishing to ward against this *reductio ad absurdum* of his definition, teaches that "the human mind does not involve an *adequate knowledge* of the parts of the body,"² and that "the ideas of the affections of the body, in so far as they are related only to the human mind, are not clear and distinct, but confused."³

The human mind is defined, in the second place, as *the idea of an idea* (*idea idæ* or *idea mentis*).⁴ In other words, mind, after having been defined as *consciousness*, is now defined as *self-consciousness*. The second definition is supplementary of the first, and, like the first, defines mind with distinct reference to body. For, when we say that mind is the idea of an idea, we mean the idea of the idea of the body. Self-consciousness is consciousness of self as revealed by bodily states,⁵ or the reflex consciousness of our perceptions of those states.

¹ *Op. cit.*, II, 13.

² *Op. cit.*, II, 28.

⁵ *Op. cit.*, II, 23.

³ *Op. cit.*, II, 24.

⁴ *Op. cit.*, II, 21.

Having defined mind, we next turn to the study of *knowledge*, which is the characteristic attitude of the mind towards things. In the first exercise of the mind, our knowledge is *inadequate*, *fragmentary*, and *confused*. The reason of this imperfection is the fact that at first our point of view is purely individual, the point of view of one who, being himself part of the world of reality, apprehends merely those portions of reality with which he comes in contact. The inadequacy of this kind of knowledge is increased by the tendency of the mind to form *fictitious universals*, such as "being," "man," etc., which are not a sign of the mind's strength, but rather of its weakness; that is to say, of its inability to keep impressions apart from each other when they reach a certain limit in number and complexity.¹

From this imperfect and inadequate knowledge man must pass to perfect and adequate knowledge, *by abandoning the individual and partial point of view* and by rising above himself and finite conditions; for perfect and adequate knowledge is untroubled by finite conditions and by the peculiarities of individual temperament.² In this development from inadequate to adequate knowledge, Spinoza distinguishes two stages:

(a) *Reason (ratio)* is the knowledge of the laws or principles which are common to all bodies, and which determine, not their accidental, but their essential relations.³ This kind of knowledge is acquired not *immediately*, but by *deduction*. Arguing from effect to cause, we arrive at a knowledge of the permanent and essential properties of things and of their unalterable laws and natures, — a knowledge which is superior to the imperfect individualistic knowledge, inasmuch as the latter reveals to us merely the illusory surface qualities of things. Studied from the point of view of reason, things assume a certain permanency, and consequently rational knowledge may be said to be a knowledge of things *sub quadam specie æternitatis*.

¹ *Op. cit.*, II, 49, Schol. I.

² *Cf. ibid.*, Schol. II.

³ *Op. cit.*, II, 39.

Rational knowledge is, however, necessarily incomplete. It enables us to arrive at generic and specific concepts, — partial unifications, — but it cannot lift us up to that point where knowledge is completely unified and all things are viewed *sub specie æternitatis*. This point we reach by means of

(β) *Intuitive knowledge (scientia intuitiva)*. In this stage of development the mind, being farthest removed from the individual point of view, no longer proceeds inferentially from one part of reality to another, but taking a comprehensive intuitive view of all reality, apprehends all things in the light of the first principle (substance) and, looking at all things *sub specie æternitatis*, sees all in God and God in all. From this point of view, space, time, difference are seen to disappear and to be swallowed up in the immensity of God. He who has reached this point “evolves all his ideas from that which represents the origin and source of all nature, so that that idea appears to be the source of all others”; he has arrived at the culminating point in the development of human knowledge.¹

We may remark in this theory of development of knowledge: (1) that whereas Descartes was content with making *clearness* and *distinctness* of perception a criterion of truth, Spinoza requires that, in addition to clearness and distinctness, our knowledge possess also *adequacy*, or comprehensiveness; (2) that Spinoza maintains the power of the human mind to *comprehend* infinite substance, that is to know God adequately; (3) that error exists only where knowledge is confused and inadequate; that consequently the mind never errs if it views things *sub specie æternitatis*, and that since it is the will which determines whether a man shall or shall not attain intuitive knowledge, *will* and not intellect is the source of error; (4) that the *three stages* of development of knowledge may be described as *sense-knowledge*, *scientific knowledge*, and *philosophical knowledge*. We must, however, always remember that Spinoza sets

¹ *Op. cit.*, II, 47.

the practical above the theoretical, and that he considers the third to be the most perfect kind of knowledge, not because it implies greater speculative insight into the nature of things, but because it sets the soul at rest and, like the ecstatic knowledge of which the mystics speak, enables us to despise the unrest and worry caused by the untoward events of life. This consideration brings us to the study of the ethical problems, on which all Spinoza's philosophy converges.

The Moral Nature of Man. We have seen that the essence of finite things is the *conatus existendi*, the self-maintaining impulse. In man, this self-realizing impulse accompanies each of the three stages of knowledge, assuming in each a different complexion. In the plane of confused knowledge it manifests itself as *emotions*; in the higher plane of rational knowledge it manifests itself as *will*; and in the highest plane, namely, that of intuitive knowledge, it manifests itself as the *intellectual love of God*, in which consists the blessed life of immortality.

(a) Let us consider the mind in the state of confused knowledge. Its being is thought: it is a diminished God, a God repressed, as it were, by the modes which limit its thought on every side. Like every other finite being, it strives not only to maintain itself, but also to extend its being by breaking through the modes which hem it in. But, unlike other finite beings, *the mind is conscious of this effort*. It is conscious also of the modes which affect it through the body, and it knows whether such modes diminish or increase its power of thought. This consciousness is *emotion*. In the third definition of the third part of the *Ethica*, emotion is defined:

Per Affectum intelligo Corporis affectiones quibus ipsius Corporis agendi potentia augetur vel minuitur, juvatur vel coercetur, et simul harum affectionum ideas,

and in the eleventh proposition of the same part Spinoza proves that whatever increases or diminishes the body's power of action,

increases or diminishes the mind's power of thought. *Emotion*, then, is the (obscure and inadequate) consciousness of a transition from a less to a greater, or from a greater to a less, power of body or mind.

The fundamental emotion is *desire* (*cupiditas*), which is perhaps more properly described as the mental prerequisite of all emotional activity; for it is the self-maintaining impulse itself. When a mode of the body, such as the sight of a flower, increases the mind's activity, there results the emotion of *pleasure*, or *joy* (*laetitia*); when, on the contrary, a mode of the body, such as the hearing of unwelcome news, diminishes the mind's activity, there results the emotion of *sadness* (*tristitia*). *Love* is the idea of an external thing which is the cause of joy, and *hatred* is the idea of an external thing which is the cause of sadness. *Hope* is the fluttering (*inconstans*) joy, and *fear* the intermittent sadness arising from the idea of an event which is of doubtful occurrence. When the element of doubt is removed, hope becomes *security* and fear passes into *despair*. The emotional state called *gaudium* is joy arising from the remembrance of a certain event as past, while its opposite, *regret* (*conscientiæ morsus*), is sadness arising from the remembrance of a certain event which has occurred. Both these states imply a previous doubt as to whether the event to which they refer did or did not occur.¹

The emotions are associated by *contiguity*, *resemblance*, and *causation*. This portion of Spinoza's *Ethica* is replete with instances of acute psychological analysis. The greatest defect in his treatment of the emotions is the exclusion of all intellectual emotions, such as zeal, love of God, love of justice, love of country, etc.²

The emotional life of man belongs, according to Spinoza, to the *condition of bondage*. As long as we continue to look on the modes of the finite world as they affect us through the

¹ *Op. cit.*, II, 12 ff.

² *Cf. op. cit.*, II, 27 ff.

modes of our own bodies, so long are we merely part of nature and subject to nature's inevitable laws. We may imagine that we are free, ~~because~~ we have no clear knowledge of the antecedents of the modes which affect us, but in reality every indistinct consciousness is itself physically determined, and we are no more free to act than the straw which floats down the river is free to turn and float against the current. In this condition of bondage man's moral life has not properly begun at all; for in this condition there is no right or wrong, but only pleasure or pain. (Man's moral life begins in the stage of rational knowledge, in which the emotions give place to will.)

(b) In the *second stage of knowledge* we possess adequate instead of inadequate ideas. Taking a broader view and contemplating the vast order of the universe and its eternal laws, we see that the objects of our love and aversion are really parts of the complex totality ruled by the inexorable laws of nature, and the vehemence of our passions appears to us, as it really is, no more reasonable than the child's anger at the stone which has hurt it.¹ Reason can no more be moved by pleasure or pain, by love or hatred of any finite cause of our emotions, than it can love or hate a triangle because the latter possesses three angles which are equal to two right angles. Thus the mind, when it has arrived at the plane of rational knowledge, having lifted itself above the cloudland of emotional life, having risen above the storm of passion, is no longer buffeted by every wind of feeling, or constrained by pleasure and pain, — in a word, it passes from the state of bondage to the *state of freedom*. There is a rational element in every passion, and when, having acquired an adequate idea of the passion, we recognize that rational element, blind impulse gives way to deliberate pursuit or avoidance. Remark that in the stage of rational knowledge this rational element is not yet located in God, but merely in the *common properties* of things or in *universal law*. The

¹ *Op. cit.*, V, 4, schol.

perfection of freedom and the final location of all the objects of will in God Himself, is attained by means of intuitive knowledge.

It is somewhat surprising to find that Spinoza describes the moral emancipation of man as a process of intellectual development, without distinct reference to will, which is the proper subject of moral excellence. The explanation is to be found in the fact that Spinoza identifies will with intellect. "Will and understanding," he says, "are one and the same."¹ Intelligence contains in itself that free voluntary activity which we are accustomed to regard as the exclusive function of will; for *good* or *evil* means whatever helps or hinders our power of thought.²

It is of great importance to note that freedom, as understood by Spinoza, is, even in the sense of free understanding rather than of free will, incompatible with his general concept of the universe, and is maintained only at the expense of logical consistency. If man in the state of confused knowledge is a slave to passion, "because he is part of nature" and is therefore subject to the iron rule of necessity, which governs all things from substance down to the least of the modes of substance, it follows that man cannot become free except by ceasing to be part of nature, and this he can never do. If in the state of bondage there is no germ of freedom, freedom cannot be developed by any development of knowledge. Spinoza cannot consistently avoid determinism. He should never have tried to emancipate man, just as he should never have attempted to derive the manifold from the one.

(c) We come now to the third stage in the moral emancipation of the human mind, namely, to that in which man attains to the *intellectual love of God* and the *blessed immortality*. In the fifth part of the *Ethica* Spinoza teaches that the mind, arriving at the culminating stage of intellectual development (*scientia intuitiva*) wherein it sees all things in God, "can bring it about

¹ *Op. cit.*, II, 49, corollary.

² *Op. cit.*, IV, 27.

that all bodily affections and images of things are referred to the idea of God."¹ When this state is reached all passion ceases, and emotion and volition are absorbed in the knowledge and love of God (*amor intellectualis Dei*). This intellectual love of God is the highest kind of virtue, and it not only makes man free but also confers immortality. For this love has no relation to the body or to bodily states, and consequently it cannot in any way be affected by the destruction of the body. But here it naturally occurs to us to ask, What has become of the principle that to every mode of thought there corresponds a mode of extension? When the body perishes, what extension mode corresponds to the eternal thought which is bliss and immortality? Spinoza answers that, while the mode of extension which is the human body conditioned by time and space perishes, there remains the essence of the body which is conceived under a form of eternity. At the same time the sensitive and imaginative part of the soul perishes with the actual body, so that the ultimate conclusion is that both body and soul are partly mortal and partly immortal.²

We must not overlook the fact that in his *Ethica* Spinoza speaks of the *eternity* rather than of the *immortality* of the soul; and by eternity he does not primarily mean unending duration, but a kind of rational necessity by which a thing forms, once for all, an integral part of the universe, although, of course, what is necessarily a part of the universe cannot cease to exist. Moreover, this eternity or deathlessness is *a condition into which the soul enters in this life*. "The immortality which is sanctioned by Spinoza's principles is not a quantitative, but a qualitative endowment,—not existence for indefinite time, but the quality of being above all time."³ Spinoza does not conceive immortality as originally and equally inherent in all men; he conceives it as something to be acquired by each man for himself, and as capable of being acquired in different degrees.

¹ *Op. cit.*, V, 1.

² *Op. cit.*, V, 20 ff.

³ Caird, *Spinoza*, p. 291.

Finally, we may ask whether the immortality of which Spinoza speaks is immortality at all. Is there in this concept of immortality a survival of the individual? On the one hand, Spinoza teaches that imagination and memory perish with the actual body; and with these faculties perish all the recollections, associations, educated nerve-processes, and everything else which serves to perpetuate personal traits and characteristics. On the other hand, Spinoza is careful to guard against the doctrine of absorption of the individual in God; for he teaches¹ that final happiness is a state in which man, in attaining the highest unity with God, attains at the same time the highest consciousness of self, so that in this union the distinction between God and creature is not obliterated, but rather accentuated. The conclusion seems to be that the blessed life is a state in which we shall retain our individuality, but shall have, apparently, no means of recognizing ourselves as the same individuals.²

Historical Position. What first arrests our attention in the study of Spinoza's philosophy is the strict geometrical method which he adopted. Starting with the definition of substance, he proceeds to deduce from a single truth a whole system of philosophy. From this definition we follow him to the point where he first attempts to account for the diversity of things, and there his first lapse into inconsistency occurs. In order to account for the diversity of things he is forced to assume something besides the one inert substance, and over and over again he surreptitiously introduces a principle which the logic of his premises can never justify. The truth is that, as has already been said, if Spinoza had been perfectly consistent he should never have attempted to go beyond the definition of substance, which is his starting point, and should also have been the final goal of his system.

In attempting to explain away the inconsistencies of Spinoza's thought, some have overlooked the individualistic elements in

¹ *Eth.*, V, 33. ² On Spinoza's doctrine of immortality, *Mind*, April, 1896.

his system and represented him merely as a pantheist, while others, looking upon the pantheistic elements as mere formulas, represent him as an empiricist.¹ To one he is a "God-intoxicated man"; to another he is a sordid and filthy atheist (*sordidus et lutulentus atheus*). Both these views are in a certain sense correct, and yet both are wrong. For if we consider merely the speculative elements in Spinoza's philosophy, we must pronounce him to be at once a pantheist and an empiricist, an anomalous being reminding us of the winged bull of Assyrian art, — a creature of air and a creature of earth. But, as has been pointed out above, Spinoza's aim was practical, rather than theoretical. We must not picture him as concerned merely with the speculative aspect of the problems of philosophy; we must rather picture him as he represents himself, and as we know him from the events of his life, — a poor, persecuted Jew, rejected by his co-religionists and despised by his Christian neighbors, bearing in patience the sufferings which were his lot in life. For him metaphysics was what it never had been even for Plato, — a religion and a refuge. In it he hoped to find that view of the universe which would reconcile him to his own hard fate and enable him to rise to a plane where his enemies could not reach him. We should bear these facts in mind when we criticise Spinoza, and, though they should not render us blind to his errors, which are many and serious, they should enable us to understand his thought, which is often sublime and is always deserving of sympathetic attention.

¹ For different interpretations of Spinoza, consult Pollock, *Spinoza, his Life and Philosophy*, pp. 348 ff.

CHAPTER LVII

ENGLISH EMPIRICISM

The tendency of British philosophy has always been towards the positivistic and practical rather than towards the mystical and speculative. This trait we have already observed in the philosophy of Hobbes and Bacon. It reappeared during the seventeenth and eighteenth centuries in the critical and empirical philosophy of **Locke**, in the natural philosophy of **Newton**, and in the theological doctrines of the *Deists*. How the *British moralists* of the eighteenth century applied the principle of empiricism to ethical problems, will be seen in the next chapter.

JOHN LOCKE

Life. John Locke was born in 1632 at Wrington, near Bristol. In 1646 he entered Westminster School and in 1652 he entered Christ Church, Oxford. Here, although he found Scholasticism still in the ascendency, he began to take an interest in Cartesian philosophy, and, while it is certainly incorrect to regard Locke's empiricism as an English branch of Cartesianism, there can be no doubt as to the important influence of this early study of Descartes on the philosophical career of Locke. On leaving Oxford Locke entered the household of Lord Ashley, afterwards Earl of Shaftesbury, as secretary, tutor, and physician. After the downfall and death of his patron Locke took up his residence in Holland (1683). There he remained until 1689, when he returned to England in the suite of William of Orange. He died at Oates, in Essex, in the year 1704.

Sources. Locke's works, which were first published in nine volumes (London, 1714), include the *Essay concerning Human Understanding*, *Thoughts concerning Education*, *Two Treatises on Government*, *The Reasonableness of Christianity as delivered in Scripture*, and other treatises. The best edition of the *Essay* is that of Alexander Campbell Fraser (2 vols., Clarendon Press, 1894). Manuals to be consulted: Fraser's *Locke* (*Blackwood's Philosophical Classics*, Edinburgh and Philadelphia, 1890) and Marion's *J. Locke, sa vie et son œuvre* (Paris, 1893).¹

¹ Consult also article on Locke in *Encyc. Brit.*, Dewey's *Leibnis's New Essays* (Chicago, 1888), and Green's *Introduction* in edition of Hume's *Works*.

DOCTRINES

Starting Point. All Locke's philosophy centers in his theory of cognition, and his theory of cognition is based on the principle which may be enunciated negatively by saying that there are no innate ideas, or affirmatively by saying that all knowledge comes from experience.

There are no innate ideas. The first book of the *Essay* is devoted to proving that "there are no innate principles in the mind." Locke observes that the universal acceptance of certain principles is taken as a proof of their innateness. He then proceeds to show that facts do not sustain the contention that the principles in question, or, indeed, any principles, are universally accepted. Children and uneducated persons are ignorant of the principles of identity and contradiction; the existence of atheism and polytheism demonstrates that the idea of God is not present in the minds of all men from the beginning, and the well-known diversity of the moral ideals of different races and nations proves that the elementary principles of morality are not universally accepted. He further adduces positive evidence against the innateness of these principles, arguing that the ideas which compose them are abstract, and therefore do not appear in consciousness until a comparatively late period in the mental development of the individual. Here, as well as elsewhere, Locke assumes that to be in the mind and to be known are one and the same.

The mind, therefore, is in the beginning a *blank sheet*, or, to use the Aristotelian phrase, a *tabula rasa*. It remains to inquire how our ideas are acquired.

Analysis of Experience. The second book of the *Essay* is devoted to the task of showing how our ideas originate by experience. Experience, Locke teaches, is twofold: *sensation*, or the perception of external phenomena by means of the senses, and *reflection*, or the perception of the internal phenomena, that

is, of the activity of the understanding itself. From these two sources arise all our *ideas*. Now, our ideas are either *simple* or *complex*. Simple ideas are those which are "furnished" to the mind by sensation and reflection, the understanding itself remaining perfectly passive; complex ideas are those which the understanding "makes" by "repeating, comparing, and combining" simple ideas.¹

(a) *Simple ideas*. Simple ideas are divided into four classes: (1) those which come into the mind by one sense only; (2) those which convey themselves into the mind by more senses than one; (3) those which are had from reflection only; (4) those which are suggested to the mind by all the ways of sensation and reflection. To the first class belong not only the ideas of color, taste, etc., but also that of solidity, or impenetrability. It is this quality, and not, as Descartes taught, extension, that is the primary attribute of body. To the second class belong our ideas of motion, space, etc. As examples of the third class Locke instances the ideas of thought and will, while to the last class he assigns our ideas of pleasure and power.²

With regard to the *validity of simple ideas*, Locke adopts Boyle's division of the qualities of bodies into primary and secondary. *Secondary* qualities, such as colors, tastes, etc., do not really exist in bodies; real existence can be attributed only to *primary* qualities, such as bulk, figure, motion, etc., which have the *power* to produce in us the simple ideas of secondary qualities. Here Locke fails to distinguish between the psychic and the physical aspect of secondary qualities, and from the undeniable fact that the quality of color, for example in its psychic aspect, exists in the mind alone, concludes that, in no true sense of the word, can color be said to exist outside the mind.³

(b) *Complex ideas*. In the twelfth chapter of the second book of the *Essay*, Locke divides *complex ideas* into three classes: ideas of *modes*, ideas of *substances*, and ideas of *relations*.

¹ *Essay*, II, 2.

² *Op. cit.*, II, 3-6.

³ *Cf. op. cit.*, II, 8.

(a) *Modes* are defined as "complex ideas which, however compounded, contain not in them the supposition of subsisting by themselves, but are considered as dependencies on or affections of substances." *Simple* modes are combinations of the same simple idea: thus, distance, surface, figure are modifications and combinations of the simple idea of space; duration, time, and eternity are simple modes of the idea of duration, while memory, reasoning, and judging are simple modes of the idea of thinking. *Mixed* modes are combinations of different kinds of simple ideas. For example, the idea of sacrilege or of murder is made up of the simple ideas of action, circumstance, motive, etc.¹

(β) *Substance*. Not being able to conceive how simple ideas can subsist by themselves, we form a complex idea of *substance* as the substratum which "upholds" them. Substance, then, is not primarily conceived as that which is capable of subsisting by itself, but rather as that which upholds or supports the qualities of things.² Thus, the substance of the rose is the complex idea of that which upholds or supports the simple ideas, — color, fragrance, softness, etc.

Whatever Locke may have meant when he said that our idea of substance is obscure, his First Letter to the Bishop of Worcester removes all doubt as to his belief in the *real existence of substance*. Indeed, the letter explicitly distinguishes between our knowledge *that* substance is and our knowledge of *what* it is.

Substance is threefold, — *bodily*, *spiritual*, and *divine*. We have as clear an idea of spiritual substance as we have of bodily substance; for thought is as easily known as extension, and will is as easily known as impulsion or force. And the idea of divine substance offers no special difficulty; for it is merely the complex idea made up of our ideas of existence, power, knowledge, etc., to which is added the idea of infinite. The idea of infinite is obtained by the addition of finite to finite.

¹ *Op. cit.*, II, 12-13.

² *Op. cit.*, II, 23.

(γ) *Relations*. A *relation* arises "when the mind so considers one thing that it does, as it were, bring it to, and set it by another, and carries its view from the one to the other."¹ Relations are innumerable. Locke undertakes to discuss merely the principal relations, as, for example, causality and identity.

Although Locke's analysis of the relation of *causality* seems unimportant when compared with Hume's more thorough analysis of the causal axiom, nevertheless the mere fact of reducing causality to a relation rather than to the category of substance or action is a revolution in philosophy. Locke defines a *cause* as that which produces, and an *effect* as that which is produced. He does not, therefore, reduce causality to mere sequence; he teaches that there are real causes as there are real substances.

The relation of *identity* arises "when, considering anything as existing at any determined time and place, we compare it with itself existing at another time."² Locke teaches that the principle of individuation is existence itself; but as the existence of living bodies is not the same as that of mere masses of matter, the identity of living bodies is the permanence of organization, while the identity of a mere mass of matter is the identity of its aggregated particles (atoms). *Personal identity* (the identity of man) is the continuity of consciousness. Locke apparently fails to distinguish between the psychological and the ontological aspect of the problem of personality, — between the question, How is personal identity known? and the question, How is personal identity constituted?

Philosophy of Language. In the third book of the *Essay* Locke treats of the philosophy of language. Words do not, as is generally supposed, signify things. Neither do they, in their primary or immediate signification, stand for ideas common to all men, but merely for *the ideas in the mind of him who uses them*. Now, it is impossible that every particular thing should have its own name; indeed, "the greatest part of words are

¹ *Op. cit.*, II, 25.

² *Op. cit.*, II, 27.

general terms" used to express general ideas. The generality and universality of names and ideas are, therefore, mere creatures and inventions of the understanding and belong not to the existence of things (nominalism). Locke considers, in particular, the relation of our universal ideas to the essences of things, pointing out the distinction between *nominal* and *real* essences. Real essence is "the very being of anything, whereby it is what it is"; nominal essence is "the abstract idea which the general name stands for."¹ Thus, the real essence of gold is that which makes gold to be what it is (the "substantial form" of Aristotle and the schoolmen), while the nominal essence is the complex idea of the color, weight, malleability, etc., of gold. Now we can and do know the nominal essences of material substances, but, as to real essences, although we know that they exist we cannot know what they are; for we have no means of judging whether the real essence which constitutes the "insensible" parts of gold is like the nominal essence, which is the complex idea including yellow, malleable, etc. We know the surface qualities of things, but we are no more competent to judge what the real essence is than the countryman who sees the exterior of the clock at Strasburg and hears it strike is competent to judge of the mechanism with which the clock is provided.² Locke grants that the qualities which constitute the nominal essence are produced by the real essence, but apparently overlooks the principle that, by virtue of the similarity of effect to cause, we may proceed from the knowledge of the effect to the knowledge of the cause.

Theory of Knowledge. The fourth book of the *Essay* is devoted to the study of the extent and validity of knowledge. Knowledge is defined³ as "the perception of the connexion of and agreement or disagreement and repugnance of our ideas." It is of three kinds, — *intuitive*, *demonstrative*, and *sensitive*. *Intuitive* knowledge is "the perception of the agreement or

¹ *Op. cit.*, III, 3.

² *Op. cit.*, III, 6.

³ *Op. cit.*, IV, 1.

disagreement of two ideas immediately by themselves without the intervention of any other." It is by means of this knowledge that we perceive that three equals one and two, and it is on the same kind of knowledge that the certainty and evidence of all our knowledge depend.¹ *Demonstrative* knowledge is the perception of the agreement or disagreement of two ideas by the intervention of other ideas, as, for example, the perception of the agreement of the sum of the three angles of a triangle and two right angles. *Sensitive* knowledge is "the perception of the particular existence of finite beings without us."

Intuitive knowledge is the basis of all certitude; demonstrative knowledge is less clear than intuitive knowledge, and, therefore, inferior to it; but demonstrative knowledge is, in turn, superior to sensitive knowledge. Yet, while rating sensitive knowledge so low, and describing it as "going beyond bare probability," Locke does not deny the validity of sensitive knowledge when it testifies to the existence of external things.

Our knowledge of our own existence is intuitive; our knowledge of the existence of God is demonstrative; and our knowledge of other things is sensitive.²

Moral and Political Doctrines.³ Locke's ethical and political doctrines bear the general character of his theoretical speculations — they aim at being empirical. There are *four determinants of moral good*: reason, the will of God, the general good, and self-interest. To each of these in turn Locke appeals without determining the relations of one to the others.⁴ In his treatises on political government he *combats the principles of state absolutism*, maintaining that natural rights were in no way abrogated by the transition of primitive man from the state of nature to the conditions of political life. He defends the

¹ *Op. cit.*, IV, 2.

² *Op. cit.*, IV, 9.

³ Consult Curtis, *An Outline of Locke's Ethical Philosophy* (Leipzig, 1890).

⁴ Cf. Falckenberg, *Geschichte der neueren Philosophie*, p. 144; English trans., p. 178.

constitutional theory, advocates the supremacy of the legislative power, and teaches that, in a conflict between the legislative and the executive powers, the will of the nation is supreme, because, in such an event, sovereign authority reverts to the source whence it is derived, namely the people. Locke is commonly regarded as the founder of that philosophy of civil government which inspired the great modern movements towards popular representation, the extension of the rights of subjects, and the restriction of monarchical privileges.

Historical Position. Locke is commonly styled the successor of Bacon and Hobbes, although it is sometimes denied that he was influenced directly by the writings of either of these philosophers. The man, however, who exercised the greatest influence on Locke was Descartes.¹ This influence was indirect as well as direct. Thus, Locke begins his *Essay* by denying the innateness of ideas, — a distinctively Cartesian doctrine; and throughout his inquiry into the nature and value of knowledge he is constantly denying what Descartes affirmed, and affirming what Descartes denied. And yet the cardinal idea of Cartesianism, namely the antithesis between mind and matter, appears as a tacit assumption in Locke's inquiry, and underlies everything that Locke wrote concerning human knowledge.

Locke's original contribution to philosophy may be described by saying that he introduced the critical spirit. For him the paramount problem was to determine the nature, value, and extent of human knowledge, and the method which he employed was the empirical rather than the rational, or deductive. He applied to the study of the mind the method which Bacon advocated as best suited to the study of nature. The result which he reached was the establishment of an empiricism which is, in ultimate analysis, a system of sensism. His chief defect is superficiality, — a defect common to his school. He stopped where the real problems of philosophy begin, and although, as

¹ Cf. Thilly, *Leibnizens Streit gegen Locke* (Heidelberg, 1891), pp. 5-32.

the subsequent development of empiricism in France has shown, his premises led inevitably to materialism, he himself maintained, with characteristic inconsistency, the spirituality of the human soul and the existence of purely spiritual substances.

NEWTON

Sir Isaac Newton (1642–1727) is the most important representative of the scientific phase of the English empiricism of the seventeenth century. His chief works are *Philosophiæ Naturalis Principia Mathematica* (1687) and *Opticks* (1704). The philosophical importance of his discovery of the law and theory of universal gravitation lies in this, — that it established the fact that the physical laws which hold good on the surface of the earth are valid throughout the universe, as far as we can know anything about it.¹

THE DEISTIC CONTROVERSY

Before the time of Locke, Lord Herbert of Cherbury (1581–1633) had advocated a naturalistic philosophy of religion, thus planting the seed of the deistic doctrines which appeared after the days of Locke and found a congenial soil in English empiricism. *Deism* may be described as a movement tending to free religious thought from the control of authority. Its chief thesis is that there is a *universal natural religion*, the principal tenet of which is, “Believe in God and do your duty”; that positive religion is the creation of cunning rulers and crafty priests; that Christianity, in its original form, was a simple though perfect expression of natural religion; and that whatever is *positive* in Christianity is a useless and harmful accretion. These principles naturally provoked opposition on the part of the defenders of Christianity, and there resulted a controversy between the *deists*,

¹ Höffding, *op. cit.*, I, 408.

or *freethinkers*, as they were called, and the representatives of orthodoxy.¹

To the deistic side of the argument **John Toland** (1670-1722) contributed *Christianity not Mystrious*; **Anthony Collins** (1676-1729), a *Discourse on Freethinking*; **Matthew Tindal** (1657-1733), *Christianity as old as the Creation*; and **Thomas Chubb** (1679-1747), *The True Gospel of Jesus Christ*. **Thomas Morgan** (died 1743), author of *The Moral Philosopher*, and, according to some, **Henry St. John, Viscount Bolingbroke** (1678-1751), are also to be reckoned among the deistic opponents of Christianity.

Chief among the defenders of Christianity were **Samuel Clarke** (1675-1729), who is best known by his controversy with Leibniz concerning space and time, **William Wollaston** (1659-1724), **George Berkeley** (1685-1753), **Joseph Butler** (1692-1752), author of the *Analogy of Religion*, and **George Campbell** (1719-1796).

While this controversy was being waged, the principles of empiricism were being applied to psychology by the founders of the association school, and to ethical problems by the founders of the British schools of morals. As we shall have occasion to return to the beginnings of the association school when we come to deal with the English philosophy of the nineteenth century, we shall now take up the study of the British schools of morals.

CHAPTER LVIII

BRITISH MORALISTS²

The group of distinguished moralists who flourished in Great Britain during the eighteenth century may be said to represent the ethical phase of the empirical movement of that age. In

¹ Consult Leslie Stephen, *History of English Thought in the Eighteenth Century* (London, 1876); Hunt, *History of Religious Thought in England* (London, 1871-1873).

² Consult Fowler, *Shaftesbury and Hutcheson* (London, 1882); Leslie Stephen, *op. cit.*; Albee, *History of English Utilitarianism* (London and New York, 1902).

determining moral values, mediæval ethics had subordinated worldly interests to the interests of the future life. Hobbes, by his doctrine of state absolutism, had subjugated the moral to the political aspect of human conduct. Locke, however, admitted self-interest and the good of the many as moral determinants, and thus enabled his contemporaries and successors to develop a system of morality which should be *independent of religion as well as of state authority*, and should rest ultimately on the ego.

Towards the end of the seventeenth century, **Ralph Cudworth** (1617–1688), in his *Treatise concerning Eternal and Immutable Morality*, expounded a system of morals which, although rational rather than empirical, prepared the way for the advocates of independent morality who appeared in the following century. He taught that moral principles and ethical ideals come neither from the will of God, nor from political authority, nor from experience, but from the *ideas which necessarily exist in the mind of God and are universally and immutably present in the human mind*. He agreed with the schoolmen in maintaining the universality and immutability of the natural law, but differed from them in teaching that it is absolutely *a priori*.

Shaftesbury (1671–1713). Anthony Ashley Cooper Shaftesbury, the grandson of Locke's patron, and the author of *Characteristicks of Men, Manners, Opinions, and Times*, points out the consequences that follow from Locke's rejection of innate principles of morality, but instead of basing the morality of actions on innate principles he bases it on innate sentiment. For an innate logic of conduct he substitutes an innate æsthetic. His *concept of the universe* as a whole is *æsthetic* rather than *logical*: he conceives the all-pervading law of creation to be unity in variety. The parts of the bodily organism are governed and held together by the soul, and thus arises the unity in diversity which is the ego. But the ego is not complete in itself, for individuals are joined together into species and genera by unities higher than the individual soul, and above all species

and all genera is the mind of the Deity, which, by uniting the diversities of genera and species makes the world a cosmos, a beautiful thing.

The individual is, therefore, swayed in one direction by the impulse of self-preservation, and in another direction by the impulse to preserve the higher unity (species) to which it belongs; that individual is good in which the latter impulse is strong and the former not too strong.¹

Applying these principles to man, Shaftesbury defines the *essence of morality* as consisting in the *proper balancing of the social and selfish impulses*. There is no morality in "sensible creatures," because, although they may balance the impulse for the preservation of self with the interests of the species, they are incapable of reflecting on the nature of their impulses, or of perceiving the harmony which results when the social and the selfish impulses are properly balanced. Man, on the contrary, is endowed with the power of reflection and of perceiving and approving the harmony which results from the proper balancing of his propensities. The faculty of moral distinction is not, therefore, a rational faculty but an *æsthetic sense*, — the power of perceiving harmony and beauty.

As the harmony of impulses constitutes *virtue*, so also it constitutes *happiness*. Virtue is its own reward. Religion is an aid to virtue inasmuch as it teaches that the world is ruled by an all-loving and all-protecting God, thus confirming the æsthetic concept of the universe as a harmony. Positive religion, however, is a hindrance to virtue in so far as it promises heavenly rewards, thus making men mercenary and selfish.²

Bernard Mandeville (1670–1733) revealed, by his advocacy of a startling paradox, the weakness of Shaftesbury's system of morals, the danger namely of attaching to noble impulses so much importance as to neglect the cultivation of useful though commonplace virtues. In *The Fable of the Bees* he advocates the novel

¹ Cf. *Characteristicks* (ed. 1727), II, 14 ff.

² Cf. *op. cit.*, II, 58.

doctrine that *private vices are public benefits*. He attempts to show that just as in the hive contentment and honesty cannot go hand in hand with splendor and prosperity, so in the community of social life it is the selfish impulses — the desire of food and drink, ambition, envy, and impatience (which Shaftesbury would have us balance against the social instincts) — that lead to labor, civilization, and the social life. We must choose between *moral progress* and *material progress*, for we cannot have both.¹

In spite of the opposition which it provoked at the time, Shaftesbury's doctrine of moral æstheticism continued to win adherents, and the remaining moral systems of the period, those of *Hutcheson*, *Butler*, and *Adam Smith*, are simply the logical development of Shaftesbury's teachings.

Francis Hutcheson (1694–1746) was born in Ireland and, after teaching in a private academy in Dublin, was appointed professor of moral philosophy at Glasgow. He wrote an *Inquiry into the Original of our Ideas of Beauty and Virtue* and a *System of Moral Philosophy*.

By endeavoring to found a system of ethics on the observation of human nature as it actually is, Hutcheson imparted to the British philosophy of morals a distinctively empirical spirit. He taught that the *faculty of moral discrimination and moral approval* is not rational, nor yet æsthetic, in the sense of perceiving and approving merely the aspect of harmony or beauty, but a distinct power of the soul called *moral sense*. He maintained that there is in human nature, besides the egoistic instincts, a natural and instinctive desire to help and please others, and an equally instinctive feeling of approval of actions which aim at helping and pleasing others. The moral sense, which determines what actions are calculated to please and what actions are calculated to displease others, is distinct from reason; for reason merely aids us to find the means to given ends. The faculty of moral discrimination is not acquired by

² Cf. Höffding, *op. cit.*, I, 400 ff.

experience, having been originally planted in the soul by the Creator to enable the rational creature to know what actions promote the welfare of others and also his own welfare in conformity with the welfare of others.

Joseph Butler (1692–1752), the author of the *Analogy*, developed in his *Sermons on Human Nature* a system of morals which is practically a theological application of Shaftesbury's ethical theory. Butler agrees with Shaftesbury and Hutcheson in maintaining the immediateness of the criterion of morality, which, however, he identifies, not with a sense of harmony, nor with a sense of the pleasure and usefulness which others experience from our actions, but with *conscience*. This guide of conduct is not a deduction from practical reason, as the schoolmen taught, but a faculty which directly and immediately approves or disapproves, and which must be obeyed without regard to the effect of our action on ourselves or others. It is not a distinctively religious sentiment; still, religion is its greatest aid, for in the "cool hour," when fervor and enthusiasm have deserted him, man finds in the thought of a future life a source of moral inspiration.

Adam Smith (1723–1790), author of *The Wealth of Nations*, — a work justly regarded as the first modern treatise on political economy, — is the last, and if we except Hume the most important, representative of the empirical school of morals in the eighteenth century. His chief merit lies in the completeness and thoroughness of his psychological analysis of the criterion of morality. In his *Theory of Moral Sentiments* he develops a system of morals based on the principles that all moral judgment depends on participation in the feelings of the agent, and that an action is good if the spectator can sympathize with the end or effect of the action. He traces *sympathy* from its first manifestation (the power of imitating to a certain degree and participating to a certain extent in the feelings of others) to its culmination in moral appreciation and moral imperative.

Historical Position. The change brought about in the science of ethics by the British moralists of the eighteenth century was practically a revolution in the theory of morals. Shaftesbury, Hutcheson, and Smith, by reducing the subjective criterion of morality to feeling or sympathy, subverted the established idea of conscience as a dianoetic, or inferential, subjective norm, and substituted for it something which may be called an æsthetic or intuitional criterion. When, in studying the philosophy of the nineteenth century, we shall take up the course of the development of British systems of morals, we shall find the influence of French materialism in the hedonism of Bentham, and the influence of Kant in the importance which the successors of Bentham attach to the problem of the origin of moral obligation. The moralists of the eighteenth century were, apart from "Hutcheson's unconscious lapse into hedonism," altruistic, at least in tendency, and instead of concerning themselves with the analysis of the sense of obligation, devoted their attention exclusively to the analysis of the faculty of moral discrimination and moral approval.

CHAPTER LIX

FRENCH EMPIRICISM

When, in 1729, Montesquieu and Voltaire returned to France from England, and introduced among their fellow-countrymen the ideas prevalent among the English deists and empiricists, an impetus was given to a French empirical movement which, with characteristic disregard for the restraints of convention and positive religion, advanced from psychological empiricism to materialism in metaphysics, hedonism in ethics, and unbelief and revolt in matters of religious conviction. The social, political, and religious conditions of France in the eighteenth century contributed to this result. The court of Versailles

had become a synonym for frivolity if not for licentiousness, and even after due allowance is made for the exaggerations of historians prejudiced against the old *régime*, it must be admitted that the grievances of the subjects of the monarchy were many and serious. The Church, whose duty it was to inculcate justice and forbearance, was identified, in the minds of the people, with the monarchy which they feared and detested. Thus it was that the poets, philosophers, and essayists of the latter half of the eighteenth century found in the popular mind a field ready to receive the seeds of the materialism and naturalism which flourished in the days preceding the Revolution and bore fruit in the Revolution itself. In England the old order gradually yielded to the action of the new forces; in France the old order maintained an attitude of unyielding antagonism. In England the establishment of new political ideas was in the nature of a slow assimilation; in France the destruction of the ancient political system assumed the proportions of a cataclysm.

Speculative Sensism. The first to formulate a thoroughgoing system of sensism, as a logical development of Locke's empiricism, was the Abbé Condillac (1715-1780). In his *Traité des sensations* he reduces all knowledge to experience and all experience to sensations. In fact, consciousness with all its contents is nothing but transformed sensations (*sensations transformées*). To illustrate this, Condillac imagines a statue which is first endowed with the sense of smell, and then with other senses in succession, the sense of touch being last; for it is by means of the sense of resistance that we distinguish between *self* and *not-self*. Before being endowed with the sense of touch the statue refers odor, color, and so forth, to itself; after it has acquired the sense of touch, it refers its sensations to the external world. *Personality* is, therefore, the sum of our sensations. Condillac teaches that it is by the superiority of the sense of touch that man differs from brutes: that every sensation is accompanied by pleasure or pain; that desire springs from the

remembrance of pleasant sensations; that the "good" as well as the "beautiful" denotes a pleasure-giving quality.

With Condillac is associated **Charles Bonnet** (1720–1793), who in his *Essai de psychologie* advocates a mitigated form of sensationalism.

Ethical Sensism. The ethical deductions from sensistic psychology appear in the writings of **Helvétius** (1715–1771), author of *De l'esprit* and *De l'homme*. Helvétius teaches that *all men are equally endowed by nature*, that the difference between men arises from education, and that susceptibility to pleasure and pain, which declares itself in self-interest, is the ultimate element in human character, and the source of all mental and moral activity. Education, legislation, and positive religion are doomed to failure as long as they refuse to recognize the truth that all that is good and noble and virtuous in human conduct is based on *self-interest*.

Sceptics and Materialists. **Voltaire** (1694–1778), although not a professed philosopher, exercised a widespread influence on the philosophic thought of his century. His *Dictionnaire philosophique portatif* was written for the purpose of ridding philosophy of cumbersome technical terminology and presenting it in popular form. This necessitated *superficiality* of treatment, but, as Erdmann says, in Voltaire's superficiality lies his strength. Voltaire was not an atheist: not only did he believe that the existence of God is proclaimed by all nature, but he was even of opinion that if God did not exist we should be under the necessity of inventing a God. He defended immortality on the ground of practical necessity, and openly declared that materialism is nonsense. It was characteristic of the superficiality of the man that the earthquake of Lisbon (1775) should change him from an optimist to a pessimist. He attacked Christianity as a positive form of religion, waging unwearied war against the Scriptures, the Church, and the most sacred beliefs of Christians. In this way, by helping to undermine

belief in the supernatural, he aided the cause of materialism and atheism.

Materialism and atheism were openly taught and defended in the famous *Encyclopedia (Dictionnaire raisonné des arts des sciences et des métiers)*, which was published at Paris between the years 1751 and 1772. The principal encyclopedists were **Diderot**, **d'Alembert**, **Voltaire**, **Holbach**, and **Rousseau**. The work was sceptical, irreverent, and brilliant with keen wit and caustic satire. It was by the charms of its style, rather than by the force of its arguments, that it did so much towards *sapping the popular belief in God*, in spirituality, in human liberty, and in the sacredness of the traditional ideals of morality.

The physician **La Mettrie** (1709-1751), author of *L'histoire naturelle de l'âme* and *L'homme machine*, was one of the most outspoken defenders of materialism. He taught that everything spiritual is a delusion, and that physical enjoyment is the highest aim of human action. The soul, he maintained, is nothing but a name, unless by it we mean the brain, which is the organ of thought; thought is the function of the brain; man excels brutes simply because his brain is more highly developed; death ends all things, and consequently we should enjoy this world and hasten the reign of atheism, for men will never be truly happy until theologians will have ceased to trouble and Nature will have asserted her claims.

The materialistic monism thus flippantly defended by La Mettrie was taught with more pretension to scientific seriousness in the work entitled *Système de la nature*, which was published pseudonymously in 1770, and of which **Holbach** (1723-1789) is now universally admitted to be the author. The work may be said to be the bible of the materialists of the end of the eighteenth century.

The last representative of psychological materialism in the eighteenth century was the physician **Cabanis** (1757-1808), who taught that body and mind are identical, that the nerves are the

man, and that thought is a secretion of the brain : "Le cerveau digère les impressions . . . il fait organiquement la sécrétion de la pensée."¹

Political Philosophers. It was **Montesquieu** (1689–1755), author of *De l'esprit des lois*, who first introduced Locke's empiricism into France. In his *Lettres persanes* he had shown himself an ardent admirer of the federal form of government, but in the work *De l'esprit des lois*, written after his return from England, he holds up the English constitutional monarchy as the ideal of political organization. He contends that *right is anterior to law*, advocates the independence of the judicial power with respect to the executive and legislative powers, and defends the extension of the legislative authority of representative assemblies. He teaches that laws should be adapted to the character and spirit of the nation, and, following the empirical method, he traces the influence of climate, manners, religion, etc., on national character.

Jean Jacques Rousseau² (1712–1778) was, in one respect, the most consistent representative of the movement which we have been studying, — a movement *to establish the individualistic point of view* in religion, philosophy, and politics, — yet, in another respect, he was a most uncompromising antagonist of that movement ; for, instead of insisting on the advantages of enlightenment and civilization, he advocated a *return to primitive feeling and to the state of nature*. *Émile*, a philosophical romance, is devoted to an account of his ideal of education, and the treatise entitled *Contrat social*, to an exposition of his political philosophy. He draws an ideal picture of man, as he originally existed in the state of nature, before entering into the *social contract* by which society was first formed, and he teaches that all authority resides in the sovereign will of the people. He maintains the right of the people to assemble for the purpose of confirming, altering, and abrogating all authority

¹ *Rapports du physique et du morale de l'homme* (cf. *Dictionnaire des sciences philosophiques*, art., "Cabanis"). ² Consult Morley, *Rousseau* (London, 1873).

in the state. Thus he rejects the division of legislative, judicial, and executive powers, substituting for them the rule of popular assembly. In his religious doctrines he is a deist rather than an atheist.

Historical Position. The so-called French enlightenment of the eighteenth century is a one-sided development of the empiricism inaugurated in England by Locke and introduced into France by Montesquieu and Voltaire. If we except Rousseau, the representatives of the age of enlightenment were men of meager or at most of mediocre intellectual ability, who failed to leave any lasting impression on the development of speculative thought. Indeed, Voltaire, who certainly knew the age in which he lived, pronounced it to be "an age of trivialities." Rousseau alone spoke as one who had seriously studied the spirit of his time, when he demanded the abandonment of artificial culture and conventional refinement in favor of what is natural, simple, and therefore of permanent value in human life. To this cry of an age of unrest the French Revolution was the answer.

CHAPTER LX

THE IDEALISTIC MOVEMENT

If post-Cartesian philosophy is to be described as busying itself with the problem of the antithesis of mind and matter, the pantheistic monism of Spinoza may be designated as an attempt to solve the problem by merging matter and mind in the unity of the infinite substance, and the empirical movement as an attempt to eliminate the antagonism by reducing mind to matter. The idealistic movement, which was represented by Leibniz and Berkeley, was still another essay to remove the antithesis between mind and matter, by reducing matter to mind. Perhaps, however, the true significance of the idealistic movement will be best understood if it is regarded rather as

an attempt to restore the æsthetic and religious ideals which were threatened by the first empiricists and destroyed by the atheistic and materialistic empiricists of later times. But, whether we represent the idealistic movement as a solution of the Cartesian problem, or as a reaction against the purely scientific concept of philosophy, it will be evident, in either case, that Leibniz represents a more hesitating and less thorough, while Berkeley represents a more pronounced and more complete, form of idealism.

LEIBNIZ

Life. Gottfried Wilhelm Leibniz was born at Leipzig in 1646. At the age of fifteen he entered the university of his native city, devoting himself to the study of law and philosophy. After obtaining the degree of master of philosophy at Leipzig, and that of doctor of laws at Altdorf, he went to the court of the elector of Mainz, by whom he was sent on a diplomatic mission to Louis XIV of France. In France, England, and Holland he formed the acquaintance of the most learned men of the time, and, with the ample means at his disposal, he had no difficulty in acquiring a wonderfully wide and accurate knowledge of all the scientific and philosophical literature of the day. From 1676 until his death, in 1716, Leibniz resided at Hannover, where he held the offices of court councilor and librarian.

Sources. Leibniz did not compose a complete and extended exposition of his philosophy. His writings are, for the most part, brief treatises and essays on various scientific and philosophical problems. The most important of these are *Disputatio Metaphysica de Principio Individui*, *La monadologie*, *Essais de théodicée*, and *Nouveaux essais sur l'entendement humain* (reply to Locke's *Essay*). The principal editions of his collected works are those of Raspe (Leipzig and Amsterdam, 1765), Dutens (Geneva, 1768), Erdmann (Berlin, 1840), Foucher de Careil (Paris, 1859 ff.), and Paul Janet (Paris, 1866). Merz's *Leibniz (Blackwood's Philosophical Classics*, Edinburgh and Philadelphia, 1884) and Dewey's *Leibniz's New Essays* (Chicago, 1888) will be found useful in the study of Leibniz' philosophy.¹

¹ For summary of Leibniz' doctrines, cf. Brucker in preface to Dutens' edition of Leibniz' works (*Leibnitii Opera Omnia*, Genève, 1768, Vol. I, pp. 143 ff.). Consult article on Leibniz in *Encyc. Brit.*; also Thilly, *Leibnizens Streit gegen Locke*, Heidelberg, 1891.

DOCTRINES

General Standpoint. Descartes had started his philosophical speculations with the desire to isolate himself from his fellow-men, and to build up a philosophy which should owe nothing to his predecessors. Leibniz, on the contrary, was inspired with the thought of founding a system which should *reconcile all the systems of his predecessors*, bring Plato into harmony with Democritus, demonstrate the agreement of Aristotle with Descartes, and prove that there is no inherent contradiction between Scholasticism and modern thought.¹ This was in keeping with the many-sided and cosmopolitan character of the man who, as discoverer of the differential calculus, ranked among the foremost mathematicians of his day, and was equally eminent as a scientist, a philosopher, and a religious controversialist.

With a view to effecting this universal harmony of systems, Leibniz adopted a theory of reality which centers on the *doctrine of monads*, the *principle of preëstablished harmony*, and the *law of continuity*. He sought to establish the perfect correspondence of mind with matter and the participation of matter by mind and of mind by matter (pan-psychism).

Doctrine of Monads. Leibniz, like Spinoza, considers that the notion of *substance* is the starting point in metaphysical speculation. But, while Spinoza defines substance as independent existence, Leibniz defines it as independent power of action: "La substance ne saurait être sans action."² From this difference there arises another: if substance be defined as self-existence, it is necessarily one, and hence Spinoza was consistent with his definition when he taught that substance is one; whereas, if substance be defined as self-activity, it is essentially individual, and at the same time necessarily manifold. The manifold individual substances are monads.

¹ Cf. Fouillée, *Histoire de la philosophie* (Paris, 1891), p. 306.

² Cf. *Opera*, I, 733, and II, P. II, 19.

The *monads* are analogous to atoms; they are simple, indivisible, indestructible units.¹ They differ from the atoms in this, that no two monads are alike. They differ also in respect to indivisibility; for the atom is not an absolutely indivisible point, while the monad is a metaphysical point, real and indivisible. Finally, they differ from atoms in this, that the atom is merely a material constituent of bodies, whereas the monad is immaterial, in so far, namely, as it is endowed with the power of representation.

This *power of representation* is the essence, so to speak, of the monad. Leibniz is careful to distinguish between conscious and unconscious representation. Some monads, as for instance the human soul, are conscious of what they represent; others represent unconsciously; each monad, whether consciously or unconsciously, reflects every other monad in the universe. Each monad is therefore a microcosm, a multiplicity in unity, a mirror of all reality, in which an all-seeing eye might observe what is taking place all over the world.² One monad differs from another merely in this, that while both represent all reality, one represents it more perfectly than the other. Now, since all the activity of the monad consists in representing, and since there are different degrees in the perfection with which a monad represents other monads, every monad must be dual, partly active and partly passive. Retaining the Aristotelian terminology, while modifying the meaning of the terms, Leibniz calls the passive element the *matter*, and the active element the *form*, or entelechy, of the monad. God alone represents all monads with perfect clearness, and is therefore pure actuality; all other monads represent imperfectly, and are therefore partly active (clearly representative) and partly passive (confusedly representative), that is, composed of form and matter. It was thus that Leibniz strove to reconcile the schoolmen with modern thought.

¹ Cf. *op. cit.*, II, P. I, 22 ff.

² Cf. *op. cit.*, II, P. I, 33.

Everything in the universe is composed of monads and everything takes its place in the scale of perfection according to the degree of clearness with which it represents other monads. Every monad is partly material and partly immaterial, so that from the lowest monad, which represents unconsciously, and shows its unconscious perception in the phenomena of attraction and repulsion, up to the highest created monad, which is the human soul, there is absolute continuity without interruption or unnecessary duplication. This is known as the *law of continuity*.¹ Its counterpart is the *law of indiscernibles*. If there is no unnecessary duplication, there is no perfect similarity of forms, and, indeed, since no two monads represent the universe in exactly the same manner, no two are perfectly alike. If they were exactly alike they would not be two, but one; for it is the manner of representation that constitutes the individuality of a monad.

Preestablished Harmony. If each monad is a little universe in itself, reflecting every other monad, and individuated by its manner of representing, if it develops this power from the germs of activity inherent in itself, whence comes the correspondence of one representation with another, and the resulting harmony of the entire system of monads? Leibniz answers by postulating a *divine arrangement* by virtue of which the monads have from the beginning been so adapted to one another that the changes of one monad, although immanent, are parallel to the changes in every other monad of the cosmic system. This doctrine of preestablished harmony,² which is germinally contained in Descartes' doctrine of the relations of the soul to the body, finds its most important application in psychology. Soul and body have no direct influx on each other, but, just as two clocks may be so perfectly constructed and so accurately adjusted that they keep exactly the same time, so it is arranged that the monads of the body put forth their activity in such a way that

¹ Cf. *op. cit.*, I, 366.

² Cf. *op. cit.*, II, P. I, 24, 40, 65.

to each physical activity of the monads of the body there corresponds a psychical activity of the monad of the soul.

When we inquire into the ultimate foundation of this harmony, and look for the reason of the divine arrangement on which the harmony of the universe depends, we find an answer in Leibniz' optimistic principle, the *lex melioris*. Of possible worlds God chose the best, and, even apart from the divine choice, the best would necessarily prevail over all other possible worlds, and become actual. This *lex melioris* is itself founded on the *law of sufficient reason*,¹ that, namely, things are real when there is sufficient reason for their existence. The law of sufficient reason is, according to Leibniz, a law of thought as well as a law of being.

Psychology. From the definition of the monad it is clear that *all created reality is partly material and partly immaterial*, that there are no bodiless souls and no soulless bodies. Moreover, the law of continuity demands that the soul always think, that reason and sense differ merely in degree, and that sense-knowledge precede rational knowledge. Yet, although the soul, the "queen-monad," is akin to other monads, and although the law of continuity forbids a gap between the soul of man and lower forms, the human soul possesses intellectual knowledge by which it is discriminated from the souls of lower animals. Whence comes this intellectual knowledge? What is the *origin of our ideas*? In the *Nouveaux essais*, Leibniz not only contradicts Locke's doctrine that none of our ideas are innate,² but lays down the contrary proposition and maintains that all our ideas are innate. He teaches that the soul has "no doors or windows" on the side facing the external world, that, consequently, all our knowledge is developed from germs of thought which are innate. The innateness of our ideas is, however, implicit rather than explicit. Ideas exist potentially in the mind, so that the acquisition of knowledge is the evolution of

¹ Cf. *op. cit.*, I, 152.

² *Nouveaux essais*, Preface.

given
above

the virtually existent into the actually existent. To the principle, "Nihil est in intellectu quod prius non fuerit in sensu," Leibniz adds, "nisi ipse intellectus."¹

Have our ideas, therefore, any objective value? Leibniz answers that they have, because the evolution of the psychic monad from virtual to actual knowledge is paralleled by the evolution of the cosmic monad in the outside world. Here, as elsewhere, the harmony is preëstablished.

The *immortality of the soul* follows from its nature. The soul is a monad, self-active, self-sufficient (*suffisant à lui-même*), and is therefore as lasting as the universe itself.

Theodicy. Leibniz' principal treatise on natural theology, the *Théodicée*,² was composed for the purpose of refuting Bayle, who had tried to show that reason and faith are incompatible. The work is devoted, in a large measure, to the discussion of the problem of evil and to the defense of optimism.

Leibniz' *arguments to prove the existence of God* may be reduced to three: (1) from the idea of God (a modification of Descartes' proof); (2) from the contingency of finite being; and (3) from the character of necessity which our ideas possess. Ideas possess not merely hypothetical but absolute necessity, — a necessity which cannot be explained unless we grant that an absolutely necessary Being exists.

When it is said that the idea of God plays a teleological rather than a scientific rôle in Leibniz' system of thought, the meaning of this is that Leibniz is interested not so much in giving an account of the origin of the universe, as in discovering an absolute final cause towards which all created being tends. Indeed, we find that the idealist is always more inclined than is the empiricist to fall back on the teleological explanation, and in the philosophy of Leibniz the teleological concept is of especial

¹ Cf. *op. cit.*, II, 1.

² In Dutens' edition, I, 117 ff., *Tentamina Theodiceæ de Bonitate Dei Libertate Hominis et Origine Mali*.

importance as the foundation of the principle of sufficient reason. It is also of importance as affording a solution of the *problem of evil*, — a problem to which Leibniz devoted much attention.¹ He distinguishes *metaphysical evil*, which is mere limitation or finiteness, *physical evil*, which is suffering, and *moral evil*, which is sin. The ultimate source of all evil is the imperfection which of necessity attaches to limited existence, and which therefore must be permitted by God, although it is reduced by Him to the minimum, and made to serve a higher purpose, — the beauty and harmony of the whole. Leibniz exhorts us to consider evil, not in its relation to parts of reality, but in its relation to the totality of being. "We can see," he writes, "only a very small part of the chain of things, and that part, moreover, which displays the most evil, and which is, therefore, well suited to exercise our faith and our love of God."²

Historical Position. The philosophy of Leibniz cannot, like that of Locke, be characterized as superficial. It takes up, and attempts to solve, the most important questions of metaphysics and psychology. In spirit and tone, rather than in method and content, it is Platonic, that is, inspired by idealism and inclined to the poetic rather than to the scientific synthesis. And herein lies its principal defect: it is unreal. For although Leibniz was as fully alive as was any of his contemporaries to the importance of scientific study and experimental investigation, his philosophy is built, not on the data of experience, but on *a priori* definitions and principles. Yet we must not on this account underrate the importance of Leibniz as a speculative thinker. He rendered inestimable service to the cause of philosophy by setting himself in determined opposition to the current of empirical sensism. Besides, the study of his philosophy is healthful; it expands the mind, opens up new vistas of philosophic syntheses, and is an invaluable aid to the understanding of subsequent systems.

¹ Cf. *Opera*, I, 478 ff.

² Letter to Bourguet, quoted by Höffding, *op. cit.*, I, 366.

In the philosophy of Berkeley we find another phase of idealism, an idealism carried to the point of the absolute denial of the reality of matter.

BERKELEY

Life. George Berkeley was born at Dysert, in County Kilkenny, Ireland, in the year 1685. After having made his elementary studies at Kilkenny, he went, in 1700, to Trinity College, Dublin, where, owing to the influence of Molyneux, the philosophy of Locke was in the ascendancy. From the *Common-place Book*, in which, as early as 1705, Berkeley began to set down his thoughts on philosophical problems, it appears that, while still at Trinity College, he had begun to study Descartes and Malebranche as well as Locke. In 1709 he published his *New Theory of Vision*, and in the following year, his *Principles of Knowledge*. In 1713 he went to London, where he formed the acquaintance of Steele, Collins, Swift, Pope, and Addison, and in the winter of the same year he visited Père Malebranche at Paris. After several years spent in France and Italy, he returned to London in 1720, to find the whole country in a turmoil over the failure of the South Sea Scheme. It was this condition of affairs that prompted Berkeley to write his *Essay towards preventing the ruin of Great Britain*. In 1721 he returned to Ireland to receive a deanery in the Established Church. From 1723 until 1731 he was occupied with his famous scheme for converting the American Indians and with the project of founding for that purpose a college in Bermuda. The two years which he spent at Whitehall, near Newport, Rhode Island, while waiting for the government grant promised by Sir Robert Walpole, afforded him an opportunity to continue his philosophical studies and to make the acquaintance of Samuel Johnson, through whom he may be said to have influenced Jonathan Edwards, the first representative of philosophy in America. On returning to London in 1731, Berkeley published his *Alciphron, or the Minute Philosopher*, a dialogue directed against the freethinkers (minute philosophers). In 1734 he was made bishop of Cloyne, in Cork. In that "serene corner" he combined the study of Plato with the advocacy of tar water as a cure for all human ills, publishing *Siris; A Chain of Philosophical Reflections and Inquiries concerning the Virtues of Tar Water*, etc. In 1752 he went to Oxford, where he died in the following year.

Sources. Berkeley's most important works are *An Essay toward a New Theory of Vision*, *A Treatise concerning the Principles of Human Knowledge*, *Three Dialogues between Hylas and Philonous*, *Alciphron, or the Minute Philosopher*, the *Analyst*, and *Siris*. The best edition of his

collected works is Fraser's (4 vols., Clarendon Press, 1871, new edition, 1901). Fraser's *Berkeley* (*Blackwood's Philosophical Classics*, Edinburgh and Philadelphia, 1894) is an excellent introduction to the study of Berkeley and his philosophy.¹

DOCTRINES

General Aim of Berkeley's Philosophy. In the *Common-place Book*, of which mention has already been made, we find the following entry: "The chief thing I do, or pretend to do, is only *to remove the mist and veil of words.*" The great obstacle to the discovery and acceptance of truth is, Berkeley thinks, the use of words which represent abstractions of the mind and prevent us from arriving at a knowledge of "things." Locke had indeed announced the principle that our knowledge extends only to ideas; but he straightway proceeded, Berkeley observes, to violate this very principle when he maintained that we know the qualities and powers of things outside the mind and have a "sensitive" knowledge of their existence. Berkeley, therefore, starts where Locke had started, but he aims at going farther than Locke had gone, — at establishing the truth of the conclusion that "all things are ideas," a conclusion which Berkeley regards as necessarily involved in Locke's principle that *our knowledge extends to ideas only.*

Immaterialism. In his *New Theory of Vision*, Berkeley takes the first step in the direction of immaterialism. He shows, in the first place, that the only phenomena which we perceive by means of sight are colors, and that with these we associate the phenomena of touch and muscular movement. He then proceeds to show that the reason of the association is "custom," "experience," or "suggestion." The conclusion is that what we "see" in the world around us is far more *dependent on mind* than we are commonly aware of.

¹ Consult also Fraser's *Selections from Berkeley* (fourth edition, London, 1891) and Simon, *Universal Immaterialism* (London, 1862).

In the *Treatise concerning the Principles of Human Knowledge*, he takes up once more the problem of knowledge, and endeavors to show that what he had proved to be true of the phenomena of sight is true of the whole phenomenal world of sense; he tries, moreover, to find the reason for the custom, experience, or suggestion, by virtue of which we associate certain phenomena with certain others. He teaches that all the *qualities of matter, primary as well as secondary*, resolve themselves into *mind-dependent phenomena*. What, then, is it that groups these phenomena, for example, the color, size, shape, etc., of an orange, into those clusters or aggregates which we call "things"? The answer that phenomena are grouped together by an inert, lifeless matter is self-contradictory, because phenomena, being essentially mind-dependent ideas, cannot exist in an unperceiving substance.¹ Besides, matter is a mere abstraction, one of those words which merely serve to throw a "veil and mist" between the mind and a knowledge of truth. It is evident, therefore, that both the popular and the philosophical conceptions of matter are absurd. There is no material substratum of things; mind and mind-dependent phenomena alone exist; to be is to be perceived, — *esse est percipi*.

Yet the world is not a chaos, but a cosmos: there is a continual change and succession of phenomena, and in all this change and succession there is order and regularity. "There is, therefore, some cause of these ideas, whereon they depend . . . , but it has been shown that there is no corporeal or material substance: it remains, therefore, that the cause of ideas is an incorporeal substance or spirit."² Now, since the ideas actually perceived by sense have no dependence on my will, it follows that it is not my mind but the *eternal, uncreated spirit* that produces them.³

Matter does not exist: spirit exists; the "external world" is spirit and the phenomena which spirit produces in the created

¹ *Works*, I, 142. References are to Fraser's edition (Clarendon Press, 1871).

² *Op. cit.*, I, p. 169.

³ *Op. cit.*, I, p. 172.

mind; the only noumenal realities are God and human minds, — these are the conclusions in which Berkeley's immaterialism is summed up. It follows that there are no secondary causes and that the laws of nature are really laws of the Eternal Spirit.

Theism. In the *Dialogues*, and especially in the *Alciphron*, Berkeley undertook to show what is meant by the Eternal Spirit, to Whom he had, in his earlier treatises, referred the persistence and activity of the phenomena into which he had analyzed the "external world." His line of reasoning may be described as *analogical*: just as we "see" men we "see" God. As we argue from the phenomena of sight, hearing, etc., to the existence of the human spirit in men, so we may argue from the phenomena of sense in general to the existence of the Infinite Spirit Whose thoughts (physical laws) are conveyed to us in the language of sense phenomena (physical qualities). *Alciphron*, the sceptic, confesses, "Nothing so much convinces me of the existence of another person as his speaking to me." To which Euphranor replies, "You have as much reason to think the Universal Agent, or God, speaks to your eyes as you can have for thinking any particular person speaks to your ears."¹

Platonism. The study of Plato, which, during his residence at Cloyne, Berkeley combined with the study of the medicinal properties of tar water, developed in the mind of our philosopher a growing *tendency towards a mystic view* of the problem of the ultimate reality of things. In the metaphysical portion of the *Siris*, which he published at this time, he occupies himself with the problem of showing how we may arrive at a higher knowledge of God than that afforded by sense-phenomena. In his *Dialogues* he was satisfied with refuting atheism by showing how God speaks to us in nature, but now he seeks a higher and deeper knowledge. The study of Plato has led him to the realization of the "uncertain, ever-fleeting, and changing nature" of sensible things, and to the consequent depreciation

¹ *Op. cit.*, II, 146 ff.

of sense-knowledge as being "properly no knowledge, but only opinion."¹ Therefore he counsels the seeker after truth to cultivate the use of intellect and reason; to penetrate, by the exercise of these faculties, to a knowledge of the inner nature of things; and through *rational faith in causality*, to realize that "there runs a *chain* throughout the whole system of beings," and that, by ascending from what is lower to what is higher, the mind may reach a knowledge of the Highest Being. This is a lifelong task. "He that would make a real progress in knowledge must dedicate his age as well as his youth, the later growth as well as first fruits, at the altar of Truth."

Historical Position. It was Berkeley's intention to remove "the mist and veil of words," and then from empirical principles to refute materialism and atheism. If matter does not exist, there is certainly no justification for materialism, and if all our ideas are produced in us by the Eternal Spirit, if every act of knowledge implies the existence of God, then atheism is undoubtedly irrational and untenable. Berkeley had not the least suspicion of the facility with which scepticism would take advantage of his immaterialism to reason away spirit as he himself had reasoned away material substance. "You see," says Philonous at the end of the third dialogue, "the water in yonder fountain; how it is forced upwards in a round column to a certain height, at which it breaks and falls back into the basin whence it rose; its ascent as well as descent proceeding from the same uniform law or principle of *gravitation*. Just so, the same principles which, at first view, lead to skepticism, pursued to a certain point, bring men back to common sense."² However, Berkeley built less wisely than he knew. He carried the principles of empiricism and idealism to a certain point, — it is commonly said that he is to Locke what Spinoza is to Descartes, but at that point they were taken up by Hume and carried to their logical conclusion, namely pan-phenomenalism.

¹ *Op. cit.*, II, 482.

² *Op. cit.*, I, 360.

CHAPTER LXI

PAN-PHENOMENALISM — HUME

So far the history of the philosophy of the eighteenth century has been the story of the empirical attempt to solve the Cartesian problem by reducing mind to matter, and of the idealistic attempt to solve the same problem by reducing matter to mind. There remains one more phase of eighteenth century speculation, namely, Hume's answer to the Cartesian problem, if indeed it may be called an answer, since it is rather a denial of the reason for proposing such a problem at all. For, instead of trying to untie what may be called the Gordian knot of post-Cartesian speculation, Hume cut the knot by denying the substantial existence of mind and matter.

HUME

Life. David Hume was born at Edinburgh in 1711. After an unsuccessful attempt to fit himself for the profession of law, he decided to take up the study of philosophy and literature. During the years 1734 to 1737, which he spent in France, he wrote his *Treatise on Human Nature*. The work, he says, "fell dead-born from the press, without reaching such distinction as even to excite a murmur among the zealots." Later, he recast the first book of the *Treatise* into his *Enquiry concerning Human Understanding*, the second book into his *Dissertation on the Passions*, and the third into his *Enquiry concerning the Principles of Morals*. His *Essays, Moral, Political, and Literary*, which were published at Edinburgh in 1742, met a favorable reception. In 1747 he accompanied a military embassy to the courts of Vienna and Turin, and again in 1763 he accompanied the English ambassador to the court of Versailles, where he remained until 1766. During the interval he had held the office of keeper of the Advocates' Library at Edinburgh, and had begun the publication of his *History of England*. In 1767 he was made under-secretary of state in the Foreign Office. In 1769 he returned to Edinburgh, and died there in 1776.

Sources. In addition to the works already mentioned Hume wrote a *Natural History of Religion* and *Dialogues concerning Natural Religion*.

The standard edition of Hume's philosophical works is that of Green and Grosse, 4 vols., London, 1874, reprinted 1889-1890. The student may be referred to Huxley's *Hume* (*English Men of Letters* series, 1879), to Knight's *Hume* (*Blackwood's Philosophical Classics*, 1886), and to the *Introduction* to Green and Grosse's edition of Hume's *Works*.

DOCTRINES

Starting Point. Hume's starting point is that of the *empiricist*, and his conception of the method of philosophical procedure is that of the critical philosopher. In the *Introduction* to the *Treatise on Human Nature* he writes, "To me it seems evident that, the essence of the mind being equally unknown to us with that of external bodies, it must be equally impossible to form any notion of its powers and qualities otherwise than from careful and exact experiments . . . 't is certain we cannot go beyond experience."¹ The critical element appears when, in this same *Introduction* and in the opening paragraphs of the *Enquiry concerning Human Understanding*, he reduces all philosophy to the study of human nature, basing the study of human nature on the observation of mental phenomena and "an exact analysis of the powers and capacity" of the mind.

Analysis of Mind. According to Hume, *the mind is its contents*. His analysis of the mind is, therefore, merely an inventory of the contents of the mind, or of *perceptions*. In Hume's philosophy, *perception* is synonymous with state of consciousness, the term being equivalent to the Cartesian *thought* and to the *idea* of Locke and Berkeley.

Hume divides perceptions into two classes: *impressions*, which are defined as the more lively perceptions experienced when we hear, see, will, love, etc. (perceptions, therefore, include passions and emotions as well as sensations), and *ideas or thoughts*, which are faint images of impressions.² As to the innateness

¹ *Works*, I, 308. References are to Green and Grosse's edition, 1890.

² *Op. cit.*, IV, 13.

of impressions and ideas, Hume says that, if by *innate* we mean contemporary with our birth, the dispute seems to be frivolous; but if by *innate* we understand what is original or copied from no precedent perception, then we may assert that *all our impressions are innate and our ideas not innate*.¹ When, therefore, Hume speaks of memory, imagination, ideas of relation, abstract ideas, etc., he is speaking of mental faculties and states which are ultimately reducible to sense-faculties and to the impressions of the senses.

What, then, are the objects of our impressions? Hume answers that we do not perceive substance nor qualities, but only our own subjective states. "T is not our body we perceive when we regard our limbs and members, but certain impressions *which enter by the senses*." The last words seem to indicate a belief in an external cause of our impressions, and, indeed, Hume is not at all consistent in his subjectivism; for he admits, in at least one passage, the possibility of our impressions either arising from the object, or being produced by the creative power of the mind, or being derived from the Author of our being.

The *denial of the substantiality of the mind* is Hume's most distinctive contribution to psychology. It is, he says, successive perceptions only that constitute the mind. The substantiality of the ego is a delusion; what we call mind is simply "a heap or collection of different perceptions united together by certain relations, and supposed, though falsely, to be endowed with simplicity and identity."² Thus did Hume complete the work of empiricism. Locke reasoned away everything except the primary qualities of bodies and the unknown substratum (substance) in which they adhere; Berkeley showed that even the substance and primary qualities of bodies might be reasoned away, and now Hume applies the same solvent to the substance of mind itself, and leaves nothing but phenomena.

¹ Note to the second edition of the *Enquiry*, *Works*, IV, 17.

² Cf. *Works*, I, 534.

If the substantial nature of the ego is a delusion, *immortality is not a datum of reason*. We are not surprised, therefore, to find that in the essay *On the Immortality of the Soul*, Hume, after examining the arguments in favor of immortality, which arguments he divides into metaphysical, moral, and physical, concludes that "it is the gospel, and the gospel alone, that has brought life and immortality to light."

Analysis of Causation. Quite in keeping with Hume's denial of substance is his analysis of causation into a succession of phenomena. All our ideas, he teaches, are connected either by resemblance, contiguity in time, contiguity in space, or causality. *Causality, then, is merely a relation between our ideas*; but is it an *a priori* relation, and if not, whence and how does it arise?

The first of these questions Hume answers in the negative. He formulates the *principle of causality* as follows: Whatever event has a beginning must have a cause.¹ He maintains that "the knowledge of this relation (causality) is not, in any instance, attained by reasonings *a priori*; but arises entirely from experience, when we find that any particular objects are *constantly conjoined* with each other."² All distinct ideas are separable from each other, and, as the ideas of cause and effect are evidently distinct, 't will be easy for us to conceive any object as non-existent this moment, and existent the next, without conjoining to it the distinct idea of a cause or producing principle."³ The argument, as Huxley remarks,⁴ "is of the circular sort, for the major premise that all distinct ideas are separable in thought, assumes the question at issue."

The axiom of causality, therefore, comes from experience. But, Hume observes, one instance does not constitute sufficient experimental evidence of the causal connection of two phenomena. When, however, "one particular series of events has

¹ Cf. Huxley's *Hume*, p. 120. In Hume's *Treatise on Human Nature*, p. 381, occurs the form, "Whatever has a beginning has also a cause of existence."

² *Works*, IV, 24.

³ *Op., cit.*, I, 381.

⁴ *Hume*, p. 122.

always, in all instances, been conjoined with another, we make no longer any scruple in foretelling one on the appearance of the other. . . . We then call the one *cause* and the other *effect*. We suppose that there is some connexion between them : some power in the one by virtue of which it infallibly produces the other. . . . But there is nothing in a number of instances different from every single instance which is supposed to be exactly similar, except only that after a repetition of similar instances the mind is *carried by habit*, upon the appearance of one event, to expect its usual attendant and to believe that it will exist."¹ There is, therefore, no real dependence of effect on cause, no *ontological nexus*, but merely a *psychological* one, an expectation arising from habit or custom.

Hume, indeed, admits that, in addition to the notion of sequence of phenomena, there is in our concept of causality the idea of something resident in the cause — *a power*, force, or energy — which *produces* the effect. When, however, he comes to analyze this notion of power, he finds it to be merely a projection of the subjective feeling of effort into the phenomenon, which is the invariable antecedent. "No animal can put external bodies in motion without the sentiment of a *nisus*, or endeavor, and every animal has a sentiment or feeling from the stroke or blow of an external object that is in motion. . . . We consider only the constant experienced conjunction of the events, and as we *feel* the customary connection between the ideas, we *transfer* that feeling to the objects."²

From the empirical viewpoint, Hume's analysis of the principle of causality is thorough. If there is in the mind no power superior to sensation and reflection, no faculty by which we are enabled to abstract from the contingent data of sense the necessary elements of intellectual thought, then all the axioms of science, the axiom of causality included, are mere associations of sense-impressions. But the empirical standpoint is erroneous ;

¹ *Works*, IV, 62.

² *Op. cit.*, IV, 62, n.

in this, as in other instances, empiricism stops where the real problem of philosophy begins, as is evident from the fact that, while Hume succeeds in showing *that* one event is connected with another in our past experience, neither he nor any other empiricist has shown *why* we are entitled to expect that events which have been connected in the past will be connected in the future. Empiricism can show a *connectio facti*, but it cannot show a *connectio juris*, between antecedent and consequent, between cause and effect.

Ethics. Hume's ethical system is a development of the fundamental doctrine of the English ethical schools of the eighteenth century. He *restricts the rôle of reason* as a moral criterion and develops the doctrine that moral distinctions are determined by our sense of the agreeable and the disagreeable. Abstract distinctions, mere rational intuitions or inferences, leave us perfectly indifferent as to action, so long as they fail to acquire an *emotional value* through some relation to the passions and ultimately to the feeling of the agreeableness or disagreeableness of the action to be performed. "Nothing but a sentiment can induce us to give the preference to the beneficial and useful tendencies over pernicious ones. This sentiment is, in short, nothing but *sympathy*."¹ The following is the ultimate analysis of moral value: "No man is absolutely indifferent to the happiness and misery of others. The first has a natural tendency to give pleasure; the second, pain. This every one may find in himself. It is not probable that these principles can be resolved into principles more simple and universal, whatever attempts may be made to that purpose."²

Historical Position. Hume's philosophy is summed up in the words *pan-phenomenalism* and *scepticism*. He reduced mind as well as matter to mere phenomena, and denied the ontological nexus between cause and effect. He maintained that there is no permanent, immutable element in the world of our experience,

¹ Cf. Walckenberg, *op. cit.*, p. 190, English trans., p. 233. ² *Works*, IV, 208, n.

and that there is no valid principle which can justify metaphysical speculation concerning the world beyond our experience. It was this total subversion of the necessary and universal that awoke Kant from his dogmatic slumber, and gave rise in Scotland to the movement in favor of the philosophy of common sense.

It will be necessary, before entering on the study of these reactions against Hume, to give a brief sketch of what is known as the German illumination—the transition from Leibniz to Kant.

CHAPTER LXII

GERMAN ILLUMINATION — TRANSITION TO KANT¹

PHILOSOPHY OF LAW

During the seventeenth century **Samuel von Pufendorf** (1632–1694), who aimed at mediating between Grotius and Hobbes, and **Christian Thomasius** (1655–1728), who is considered the first of the German *Illuminati*, appeared as representatives of a new philosophy of law. They investigated the foundations of natural right, and formulated theories in accordance with the changed political conditions of Europe.

POPULARIZERS

It was the aim of many of the philosophical writers of the seventeenth and eighteenth centuries to free philosophy from the technical difficulties which rendered it inaccessible to the generality of readers, and in this way to reach the people, as the French authors of the *Encyclopædia* were doing. **Walther von Tschirnhausen** (1651–1708), **Johann Nicolas Tetens** (1736–1805), and **Moses Mendelssohn** (1729–1786) represent different phases of this movement in different departments of thought,—physical science, mental science, and religious philosophy. To the same period belongs the so-called *Pietistic movement* which aimed at counteracting the rationalistic tendency by quickening religious feeling.

During the *storm and stress* movement of the last decades of the eighteenth century, when rationalism was at its height, **Gotthold Ephraim Lessing**

¹ Cf. Falckenberg, *op. cit.*; also Zeller, *Die deutsche Philosophie seit Leibniz*, especially pp. 195–273.

(1729–1781), the philosopher-poet, expounded a system of religio-philosophical thought which may be said to be a system of natural religion, based partly on the pantheism of Spinoza's *Ethica*, and partly on the theism of Leibniz' *Théodicée*. To the same period belongs Johann Gottfried von Herder (1744–1803), whose *Ideen zur Philosophie der Geschichte der Menschheit*¹ marks an epoch in the history of the philosophy of history. In this work Herder interprets history from the point of view of the *organic unity of the human race*.

Christian von Wolff (1679–1754) is of special importance on account of the influence which he exercised on Kant's early training. He attempted to reduce Leibniz' philosophy to a systematic form, but in doing so he modified the essential tenets of his predecessor, restricting the doctrine of preëstablished harmony to the explanation of the relations of soul and body, and so changing the doctrine of the dualism of the monad as practically to restore the Cartesian antithesis of mind and matter. He devoted special attention to philosophic method. Indeed, he sometimes carried method to the extent of formalism. Wolff is the author of the well-known division of metaphysics into *ontology*, *cosmology*, *psychology*, and *rational theology*.

Retrospect. The period from Descartes to Hume was dominated by the influence of Cartesian thought, and more particularly by the doctrine of the *antithesis of mind and matter*. It was the attempt to solve the problem of this antithesis that gave rise to the pantheistic monism of Spinoza, to the materialistic monism of the thoroughgoing empiricists, to the idealistic monism of Berkeley, to the partially idealistic monadism of Leibniz, and to the pan-phenomenalism of Hume, which,—most astounding solution of all!—solves the problem of the antithesis by denying the substantial nature of both mind and matter. Here the first act ends. Kant next appears, and, appalled at the sight of the ruin which Hume has wrought, fearing for the spirituality of the soul, the freedom of the will, the existence of God, and the obligation of the moral law, opens a new scene by proposing once more the question, What are the conditions of knowledge? and prepares the way for the

¹ Translated by T. Churchill, *Outlines of a Philosophy of the History of Man*, London, 1800. Herder's complete works were published at Stuttgart in 60 vols., 1827–1830. Cf. Francke, *Social Forces in German Literature* (New York, 1897), pp. 318 ff.

philosophy of the nineteenth century by his attempt at constructive synthesis on the basis of moral consciousness.

We cannot fail to remark, also, in the development of philosophy from Descartes to Kant, a *struggle between the purely scientific view and the æsthetic religious view of the world*. Wherever empiricism held full sway, there the scientific view prevailed, and enlightenment, as it was called, was sought, rather than a deeper sense of the æsthetic and spiritual significance of things. Wherever, on the contrary, the idealistic movement prevailed, there greater value was attached to the spiritual and æsthetic solution than to the scientific solution of the problems of philosophy. But in spite of idealistic reactions, the principles of deism continued to pervade English thought, the Illumination continued to flourish in France and Germany, and Empiricism culminated in the philosophy of Hume, which expresses the last and most violent form of antagonism between the scientific and the religious æsthetic view of life. It was left for Kant to undo the work of the *Illuminati* and of Hume, and to lay the foundation for the constructive systems which were to give to the religious and æsthetic interests of human life a place beside the merely scientific elements of thought in a complete synthesis of philosophical knowledge.

Finally, we must observe in the eighteenth century a gradual increase in the importance attached to the study of man in his social and political relations, and the growth and development of the idea of an antithesis between the individual and the state. But while Rousseau was giving expression to the doctrine of *individualism* in its most extreme form, Herder, by his doctrine of the organic union of the human race, was preparing the way for the political philosophy of the nineteenth century. For the new century was to discard the notion of antithesis between the individual and the state, and, adopting an organic instead of a mechanical concept of society, was to substitute for the *individualism* of the eighteenth century a *collectivism*,

which not only the great speculative systems such as Hegel's, but all the other important movements of the nineteenth century—the evolution hypothesis, the rise of romanticism in literature, the Oxford movement, and the great industrial and commercial centralization of recent years—were to exemplify and confirm in theory or in practice.

THIRD PERIOD—FROM KANT TO OUR OWN TIME

One of the most striking results of the French and German illumination was the *nationalization of philosophy*. During the Middle Ages Latin was the language of the scientific world, and even long after most of the manners and customs of the Middle Ages had disappeared it continued to be the language in which philosophical treatises were composed. Contemporaneously with the rise of the deistic controversy in England and the spread of the illumination in France and Germany, Latin was discarded and philosophy began to speak in the vernacular. The result of this change was that philosophy ceased to be cosmopolitan in character, and racial and national traits, which had always been distinguishable, became more strongly marked. Hence we have, during the nineteenth century, *German, English, French, Scotch, and Italian* philosophy, each possessing its distinctly national characteristics. It will, therefore, be found more convenient from this point onward to follow philosophy in its national development, and to treat the history of philosophy according to nations rather than according to schools and systems.¹

¹ For the history of the philosophy of the nineteenth century consult, besides the works already referred to on p. 422, Royce, *The Spirit of Modern Philosophy* (Boston, 1892); Burt, *History of Modern Philosophy* (2 vols., Chicago, 1892), *Griggs's Philosophical Classics*, edited by Morris; *Series of Modern Philosophers*, edited by Sneath; *The Library of Philosophy*, edited by Muirhead.

CHAPTER LXIII

GERMAN PHILOSOPHY

Although the greater part of Kant's life lies within the eighteenth century, his philosophy belongs to the nineteenth. It is from the fundamental principles of his system of thought that the great speculative and practical tendencies of this third period spring. With Kant, therefore, begins the last period in the history of modern philosophy.

KANT

Life. Immanuel Kant was born at Königsberg in the year 1724. His parents were, according to family tradition, of Scotch descent. At the age of sixteen he entered the University of Königsberg, and there, for six years studied Wolff's philosophy and Newton's physics, having for teacher Martin Knutzen. On leaving the university he spent nine years as tutor in several distinguished families. He returned to Königsberg in 1755 to qualify himself for the position of licensed but unsalaried teacher (*Privat-docent*) at the university, a career in which he lingered for fifteen years. His first book, which was published in 1747, under the title *Gedanken von der wahren Schätzung der lebendigen Kräfte*, "Thoughts on the True Estimation of Living Forces," was followed by several others which treated of physical and metaphysical problems. Meantime he continued to lecture on Wolffian philosophy, employing the text-books then commonly in use, although it is evident from his written works and from the programme of his lectures that he had at this time begun to criticise both Wolff and Newton. The first outline of a definite independent system appears in the dissertation *De Mundi Sensibilis atque Intelligibilis Formis et Principiis*, which was published in 1770. In the same year Kant was appointed to the chair of philosophy at Königsberg, which he held until 1797. His epoch-making work, the *Kritik der reinen Vernunft*, appeared in 1781. This was followed by the *Grundlegung zur Metaphysik der Sitten* (1785), the *Kritik der praktischen Vernunft* (1788), the *Kritik der Urtheilskraft* (1790), and the *Religion innerhalb der Grenzen der blossen Vernunft* (1794). The last of these works provoked the hostility of the orthodox, and was the occasion of a reprimand from the government of East Prussia.

Kant spent the greater part of his life as professor at Königsberg. He never traveled, and had no appreciation of art; he was, however, thoroughly in sympathy with Nature in all her moods, professing unbounded admiration for "the starry sky above him and the moral law within him." He died in 1804.

Sources. The three *Critiques* — the *Critique of Pure Reason* (the argument of which is presented in shorter and more readable form in the *Prolegomena to any Future Metaphysic*), the *Critique of Practical Reason*, and the *Critique of the Faculty of Judgment* — form a trilogy of Kantian literature. Kant's complete works were published at various times, the best editions being Hartenstein's second edition, in eight volumes (Leipzig, 1867–1869), and Rosenkranz and Schubert's edition, in twelve volumes (Leipzig, 1838–1842). A new edition is being published by the Berlin Academy of Sciences. The *Critique of Pure Reason* was translated into English by Meiklejohn (London, 1854) and by Max Müller (London, 1881); the *Prolegomena*, by Mahaffy and Bernard (London, 1889); the *Critique of Practical Reason*, by Abbott (London, 1889); and the *Critique of Judgment*, by Bernard (London, 1892). To the list of secondary sources¹ must be added M. Ruyssen's *Kant* (*Grands Philosophes* series, Paris, 1900) and Paulsen's *Kant* (trans. by Creighton and Lefevre, New York, 1902). Wallace's *Kant* (*Blackwood's Philosophical Classics*, Edinburgh and Philadelphia, 1892) and E. Caird's *Critical Philosophy of Kant* (London, 1889) are the best English presentations of Kant's system.²

DOCTRINES

General Standpoint and Aim. In the introduction to the *Prolegomena*, Kant informs us of the origin and aim of his philosophical investigations. "It was," he observes, "the suggestion of David Hume which first interrupted my dogmatic slumber and gave my investigations in the field of speculative philosophy quite a new direction. I first tried whether Hume's objection could not be put into a general form, and soon found that the

¹ Cf. Falckenberg's list, *op. cit.*, p. 269 (English trans., p. 330). The works of Adickes, B. Erdmann, and Vaihinger are of special importance.

² Consult also T. H. Green, *Lectures on the Philosophy of Kant* (in *Works*, Vol. II); Adamson, *The Philosophy of Kant* (Edinburgh, 1879); Watson, *Kant and his English Critics* (London, 1888); article on Kant in *Encyc. Brit.*, etc.

concept of the connexion of cause and effect was by no means the only one by which the understanding thinks the connexion of things *a priori*. I sought to make certain of the number of such connexions, and when I had succeeded in this, by starting from a single principle, I proceeded to the deduction of these concepts which I was now certain were not deduced from experience, as Hume had apprehended, but sprang from the pure understanding."¹ If, therefore, we divide systems of philosophy into *rational* and *empirical*, according as they lay stress on the *a priori* concepts and principles of the pure understanding, or on the *a posteriori* impressions and associations of the empirical faculties, we may describe Kant as dissatisfied with the rational philosophy because it exaggerated the *a priori*, and with the empirical philosophy because it exaggerated the *a posteriori* elements of knowledge. Consequently he sets himself the task of examining or criticising all knowledge for the purpose of determining or, as he says, "deducing," the *a priori* concepts or forms of thought. And if it is the task of philosophy to answer the questions, What can I know? What ought I to do? What may I hope for? Kant considers that the answers to the second and third questions depend on the answer given to the first. His philosophy is, therefore, a *transcendental criticism*,² that is, an examination of knowledge for the purpose of determining the *a priori* elements, which are the conditions of knowledge, and which we cannot know by mere experience.

Division of Philosophy. Kant, as is well known, first devoted his attention to the transcendental criticism of *pure reason*, and afterwards took up the transcendental criticism of *practical reason*. In the first part of the *Critique of Pure Reason* he distinguishes the *transcendental æsthetic* and the *transcendental*

¹ Mahaffy's translation, p. 7.

² Falckenberg, *op. cit.*, p. 277 (English trans., p. 340), explains that, although Kant at different times attaches different meanings to the word *transcendental*, he always uses it as opposed to *empirical*. Cf. *Dictionary of Philosophy and Psychology* (ed. Baldwin), article, "Kant's Terminology," Nos. 12 and 13.

logic, and subdivides the latter into *transcendental analytic* and *transcendental dialectic*.

Transcendental Æsthetic is defined as the "science of all the principles of sensibility *a priori*,"¹ or *the inquiry into the a priori conditions of sensation*. Now, our external senses represent their objects as extended in *space*, and our internal senses represent our conscious states as succeeding each other in *time*. Space and time are the *a priori* conditions of external and internal sensation, — conditions or forms which make sensation possible. They are, therefore, anterior to all experience. Space and time are not, as is commonly supposed, empirical concepts derived from experience; their *a priori* character appears from the very fact that knowledge based on the nature of space and time (mathematical knowledge) is necessary and universal; for it is a primary postulate of all Kant's transcendental inquiry that *nothing which is necessary and universal can come from experience*. Space and time are not properties of things; they belong to the subject, inhere in the subject, and are, so to speak, part of the subjective world. Their rôle is to reduce the multiplicity of the object to that unity which is an essential condition of being perceived by the subject, which is *one*. They are the conditions of sensitive intuition, and have no objective reality, except in so far as they are applied to real things in the act of perception. "Space and time are the pure forms of our intuition, while sensation forms its matter."²

Transcendental Logic. General logic treats either of the pure forms of thought, or of these forms in their relation to concrete experience (applied logic). Transcendental logic treats of the origin, extent, and validity of concepts, which are neither of empirical nor of æsthetic origin, but are *a priori*. It is divided into *transcendental analytic* and *transcendental dialectic*: the first treats of the forms of the pure understanding (judgment),

¹ *Critique of Pure Reason*, p. 17. References are to Max Müller's translation.

² *Op. cit.*, p. 34.

while the second treats of the elements of that knowledge which is pure understanding applied to objects given in intuition ; and as this application is made by the reason, we may describe transcendental dialectic as the criticism of reason in the stricter sense of the word.¹

A. Transcendental Analytic. The *a priori* forms of the pure understanding are the *categories*, which stand to intellectual knowledge in the relation in which space and time stand to sense-knowledge. It will be well to consider : (a) the existence of the categories ; (b) the construction of the table of categories ; (c) the nature of the categories ; and (d) the objective value of the categories.

a. The existence of the categories. All intuitions being sensuous, and the understanding being a supersensible faculty, it is evident that the concepts which belong to the understanding are not immediately referred to an object, but to some other representation, that is, to an intuition or to another concept. All the acts of the understanding may therefore be reduced to judgments.² Now there are *judgments* which are merely *contingent and particular*, as, "This table is square" ; and there are *judgments* which are *necessary and universal*, as, "The sides of a square are equal to one another." But (and this is the fundamental assumption in Kant's *Critique*) what is necessary and universal in our knowledge is *a priori*. Therefore, there is in our knowledge of necessary and universal propositions an *a priori* element, and this is the *form*, or *category*.

b. Construction of the table of categories. Kant considers that Aristotle failed to draw up a complete and scientific table of the highest genera because that "acute thinker" did not realize that the right method to be pursued is not the analysis of being, but the analysis of thought. Now, according to Kant, *to think is to judge*, and to judge is to synthesize, or unite, two representations, namely subject and predicate. But since we

¹ Cf. *op. cit.*, pp. 42-50.

² *Op. cit.*, p. 56.

are inquiring into the *a priori* elements of thought we must empty the subject and predicate of all their empirical and intuitional content, and consider merely their relations to each other. On the different kinds of relation which exist between subject and predicate we shall base our construction of the table of categories. These relations Kant reduces to twelve, to which, therefore, correspond the twelve categories :

KINDS OF JUDGMENT	CATEGORIES
I. <i>Quantity :</i>	
Universal	Unity
Particular	Plurality
Singular	Totality
II. <i>Quality :</i>	
Affirmative	Reality
Negative	Negation
Infinite	Limitation
III. <i>Relation :</i>	
Categorical	Subsistence and Inherence
Hypothetical	Causality and Dependence
Disjunctive	Reciprocity (Active and Passive)
IV. <i>Modality :</i>	
Problematical	Possibility — Impossibility
Assertory	Existence — Non-Existence
Apodeictic	Necessity — Contingency

It may be observed, in *criticism of this system of categories*, that an analysis of judgment is not a complete analysis of thought ; for the ideas of which the judgment is composed are themselves capable of analysis. Indeed, while the analysis of judgment may be made the basis of a system of *predicables*, it is on an analysis of ideas that a system of *categories* must be based. Moreover, it is evident that in the Kantian table of categories, correctness of analysis is sacrificed to symmetry of arrangement.

c. *The nature of the categories.* Kant's *a priori* forms, or categories, are not mere subjective dispositions, mere tendencies such as Leibniz attributed to the psychic monad, — capabilities to be evolved into actuality in the process of ideation. Nor are they full-fledged ideas such as Plato attributed to the soul in its prenatal existence. They are the empty forms of intellectual knowledge, all the contents of intellectual knowledge being derived from experience.

The nature of the categories is best understood by a study of their *function*. All knowledge, whether sensuous or intellectual, is conditioned by unity, and is effected by a synthesis of the manifold of representations (sense impressions, etc.). Now, "How," Kant asks, "should we, *a priori*, have arrived at such a synthetic unity if the subjective grounds of such unity were not contained *a priori* in the original sources of all our knowledge?"¹ We have seen that the *a priori* forms which effect the requisite unity in the case of sense-knowledge are space and time. The function of the categories is entirely similar: to effect the requisite unity in the case of intellectual knowledge, — to synthesize the manifold of experience. But how is the application of the form to the contents brought about? The *a priori* forms must be brought down to the empirical contents *anteriorly to experience*; for they render empirical knowledge possible. Kant is therefore obliged to have recourse to the doctrine of *schematism*. The *schemata* are the work of the synthetic imagination, and mediate between the *a priori* form and the manifold of experience. Thus "the transcendental determination of time (which is the principal *schema*) is so far homogeneous with the category that it is general and founded on a rule *a priori*; and it is, on the other hand, so far homogeneous with the phenomenon that time must be contained in every empirical representation of the manifold."² From the fundamental *schema*, which is time, are derived as many *schemata* as there are categories.

¹ *Op. cit.*, p. 102.

² *Op. cit.*, p. 113.

The mental field thickens with the multitude of media through which and by means of which the process of intellectual knowledge takes place. We have, first, the manifold representations of sense-impression; then the application of the forms of space and time resulting in sense-intuition; next, we have the schema, and last of all the *a priori* form. And yet all this multiplicity is introduced in order to effect the synthetic unity without which knowledge is impossible. The representations are unified by the application of the *a priori* forms of space and time; the intuitions resulting from this application are in turn unified by the determining *schema*, which gives reality to the highest unifying form, namely the category. Finally, above all these is the unity of consciousness.

The doctrine of the function of the categories is well summed up in the formula, *representations without the categories are blind; the categories without representative or other empirical content are empty*. With regard to the schematism of our understanding applied to phenomena and their mere form, it were well, perhaps, to content ourselves with Kant's saying that such schematism is "an art hidden in the depth of the human soul, the true sense of which we shall hardly ever be able to understand."¹

d. The objective value of the categories. The value of the categories lies in this, that they render synthetic *a priori* judgments possible and thus make intellectual knowledge possible. In judgments which are merely analytical we remain within the given concept, while predicating something of it; but in judgments which are synthetic we go beyond the concept, in order to bring something together with it which is wholly different from what is contained in it.² It is therefore by means of synthetic *a priori* judgments that we make progress in our intellectual knowledge of reality, and since the categories are the *a priori* elements of such judgments, — the elements which confer

¹ *Op. cit.*, p. 116.

² *Op. cit.*, p. 126.

necessity and universality on them, thereby making them to be scientific,—it is evident that it is the categories that render intellectual knowledge possible. Without the categories the objects of intellectual knowledge would be *given* in experience, but not *known*.

Although the categories are *a priori*, that is, independent of sensation, they *do not extend our knowledge beyond phenomena*; they do not lead us to a noumenal knowledge of that which is *given* in sensation. Of themselves they are empty; in order to be valid they must be filled by experience, and all the content which experience can put into them is phenomenal. "The understanding *a priori* can never do more than anticipate the form of a *possible* experience; and, as nothing can be an object of experience except the phenomenon, it follows that the understanding can never go beyond the limits of sensibility. As phenomena are nothing but representations, the understanding refers them to a something as the object of our sensuous intuition. This means a something equal to *x*, of which we do not, nay, with the present constitution of our understanding can not, know anything."¹ This something is the *noumenon*, the *transcendental object*, the *thing-in-itself* (*Ding an sich*).

B. Transcendental Dialectic, which is the third portion of the *Critique of Pure Reason*, has for its object the examination or criticism of the *ideas*. These are forms less general than the categories, elements of reasoning rather than of judgment, serving to unify the manifold of intellectual experience, just as the categories and space and time serve to unify the manifold of sense-representation and impression. Consequently they do not refer immediately to the objects of intuition, but only to the understanding and its judgments. Now, just as the forms of judgment furnished us with a basis for the system of categories, so the forms of inference serve as a basis for the enumeration of ideas. To the three forms of syllogistic reasoning, namely

¹ *Op. cit.*, pp. 201 and 204.

categorical, hypothetical, and disjunctive, correspond the three ideas of the reasoning faculty, namely the *idea of the soul*, or thinking subject, the *idea of matter*, or the totality of phenomena, and the *idea of God*, the supreme condition of all possibility.¹ Reason being immanent, that is, having no direct relation to objects, these three ideas, the psychological, the cosmological, and the theological, should remain immanent. The attempt to establish them as existing outside the mind must necessarily lead to an entanglement of contradictions, and it is the aim of the transcendental dialectic to expose these contradictions and so dispel the transcendental illusion, which has vitiated every system of psychology, cosmology, and theology.

a. Psychological idea. Kant rejects the rational psychology which attributes to the soul identity, substantiality, immateriality, and immortality. The whole Wolffian and Cartesian system of psychology he considers to be false in its starting point, — the assumption, namely, that we have an intuitive knowledge of the understanding. We have, he contends, no such intuition. Thought is a succession of unifications, or syntheses: at the apex of the pyramid, the base of which is the manifold representation, stands the conscious principle; but as the conscious principle is devoid of empirical content, it is, like the noumenon, an *x*, an unknown quantity. Descartes says "I think," but what, Kant asks, is the *I*? It is *the emptiest of all forms*, a psychological subject of conscious states, which never can become the logical subject of a predicate referring to these states or to anything else. *Empirical psychology*, which alone can extend our knowledge of mental life, does not aim at telling us anything about the *ego*; *rational psychology*, which does aim at establishing truths concerning the *ego*, is wrong in its very starting point and is full of contradictions in the course of its development.

Kant, of course, does not deny the unity, substantiality, etc., of the soul; for he contends that reason is as far from being

¹ *Op. cit.*, pp. 240 ff.

able to disprove as it is from being able to prove these truths, which, as the *Critique of Practical Reason* will demonstrate, rest ultimately on man's moral consciousness.

b. Cosmological idea. The totality of phenomena, or the world of which the cosmologists speak, presents, according to Kant, difficulties similar to those presented by the psychological idea. To every *thesis* which is formulated concerning the ultimate nature of matter, may be opposed an equally plausible *antithesis*. The *antinomies*, however, as these apparent contradictions are called, do not disprove the formal correctness of the inferential process employed in rational cosmology; they merely show that the cosmical concepts — matter, cause, etc. — extend beyond the limits of empirical knowledge and rational experience. The antinomies are four, corresponding to the four classes of categories:

a. Thesis: The world must have a beginning in time and be inclosed in finite space. *Antithesis:* The world is eternal and infinite.

β. Thesis: Matter is ultimately divisible into simple parts (atoms or monads) incapable of further division. *Antithesis:* Every material thing is divisible; there exists nowhere in the world anything simple.

γ. Thesis: Besides the causality which is according to the laws of nature and, therefore, necessary, there is causality which is free. *Antithesis:* There is no freedom; everything in the world takes place entirely according to the laws of nature.

δ. Thesis: There exists an absolutely necessary Being belonging to the world, either as a part or as a cause of it. *Antithesis:* There nowhere exists an absolutely necessary Being, either within or without the world.

It is only in the case of the first two antinomies that Kant considers both the *thesis* and *antithesis* to be false.

c. Theological idea. The idea of God is, according to Kant, the ideal of reason, that is, the expression of the need which reason has of coming to a perfect unity. Kant nowhere denies the objective validity of this idea; he contends, however, as we shall see, that it rests on the moral consciousness, not on any speculative basis. The criticism of the theological idea is,

therefore, confined to an examination of the *ontological*, *cosmological*, and *physico-theological* proofs which natural theology brings forward to establish the thesis that God exists.

The *ontological* proof, which was formulated successively by St. Anselm, Descartes, and Leibniz, deduces the existence of God from the concept which we are able to form of Him. Kant points out the impossibility of arguing from the idea of a thing to the existence of that thing. Existence, he observes, is not a quality or attribute of the same nature as goodness or greatness : it adds nothing to the content of the idea. "A hundred real thalers contain no more, as to concept, than a hundred possible ones." Besides, all existential propositions are synthetical, because existence is not a quality of an idea, but a relation between the idea and experience. Therefore an existential proposition cannot be demonstrated from a concept without reference to experience.

The *cosmological* proof argues from the existence of contingent being to the existence of necessary Being. Kant criticises the argument from the view point of his own theory of cognition. Since the axiom of causality, on which the argument rests, is a synthetic judgment, it cannot be applied beyond the limits of experience. "The principle of causality has no meaning and no criterion for its use beyond the world of sense, while here it is meant to help us beyond the world of sense."¹

The *physico-theological* argument is that which is commonly called the argument from the purposiveness or design which is evident in the order of nature. Now, order and design "may prove the contingency of the form but not of the matter"; they may prove that there is a designer, but not that there is a creator, of the universe. Kant wishes to "commend and encourage" the use of such a line of reasoning, but he maintains that "it cannot by itself alone establish the existence of a Supreme Being."²

¹ *Op. cit.*, p. 491.

² *Op. cit.*, p. 503.

The conclusion of the transcendental dialectic is, therefore, that *the ideas do not add to our experience*. Speculative philosophy does not add to our knowledge of the soul, the world, and God. Nevertheless, these ideas, although they do not *constitute* experience, *regulate* it, so that we cannot better order the faculties of the soul than by acting as if there were a soul ; neither can we better order our experience of the external world than by representing it as made up of a multiplicity of created things, each of which stands to the rest of reality in reciprocal relation necessitated by law, and all of which spring from a common ground of unity and are ruled by the same guiding principle. Moreover, the criticism of the ideas shows that, while speculative philosophy is unable to establish the existence of God, the immortality of the soul, and the freedom of the will, materialism, fatalism, and atheism are equally unable to overthrow our belief in the truth of these doctrines. The ideas therefore clear the way for a rational faith founded on the moral consciousness.

Before we come to the constructive portion of Kant's philosophy as contained in the *Critique of Practical Reason*, we may here sum up the results of his destructive criticism of speculative philosophy and of theoretical knowledge in general. There is *no transcendent knowledge*, — no knowledge beyond the limits of experience. In our knowledge of the empirical world there is, however, *a transcendental element*, — the *a priori* forms of sensation, the categories and the regulative ideas, which make empirical knowledge possible, although they do not add to it either in content or in extension. The moral consciousness alone takes us beyond experience to the immutable, eternal, and universally valid ground on which all higher truth rests.

Critique of Practical Reason. When we pass from the *Critique of Pure Reason* to the *Critique of Practical Reason*, from the study of what is, or must be, to the study of what ought to be, from the inquiry into the conditions of possible theoretical experience to the inquiry into the conditions of actual moral

experience, from the analysis of thought to the analysis of action, we find ourselves in an altogether new atmosphere. The second *Critique* discovers in the obligation of the moral law the *aliquid inconcussibile*, which, as the first *Critique* taught us, is not to be found in rational speculation ; and thus are restored the existence of God, the immortality of the soul, and the freedom of the will, which in the first *Critique* were relegated to the rank of mere regulative formulas.

Kant's emphatic assertion of the *supremacy of the moral law* is well known. The starry heaven above us and the moral law within us are, he was accustomed to say, the only objects worthy of supreme admiration. But on what is the moral law founded? Consciousness tells me that I *ought* to perform certain actions, and a little thought suffices to convince me that the *oughtness* is *universal and necessary*. If I analyze, for example, the sense of obligation in the negative principle, Lie not, I find that, apart from the question of motive or utility, which are contingent determinants, it is a principle valid throughout all time and space. Now it is these properties, necessity and universality, that will enable us to answer the question, On what is the moral law founded?

It is necessary, however, to remark that, according to Kant, the *universality and necessity affect the form, not the contents*, of the moral law, so that in the example just mentioned the universality of the prohibition, Lie not, is derived from the general formula, into which all obligation is translatable, — So act that you can will that the maxim on which your conduct rests should become a universal law.¹ More simply, the maxim on which your conduct rests must be fit to be an element of universal legislation.

The moral law is *not founded on pleasure*; for nothing is more unstable than feeling, which is the determinant of pleasure,

¹ *Grundlegung zur Metaphysik der Sitten*, 2. Abschn., *Werke* (ed. Kirchmann), III, 44; also *Kritik der Praktischen Vernunft*, No. 7, *Werke*, II, 35.

whereas the moral law, because of its universality and necessity, must rest on an unchangeable foundation. It is *not founded on happiness*; for the essential characteristic of the moral law is its obligatoriness, and no one is obliged to be happy. It is *not founded on a moral sense*; for mere sense cannot represent obligation as necessary and universal. Finally, it is *not founded on perfection of self*; for perfection is, in final analysis, reducible to pleasure or happiness.

The moral law is *its own foundation*; it is *autonomous*, being neither imposed by any external motive, nor deduced by the purely speculative reason from theoretical principles, but being impressed on the will by the practical reason¹ and revealed to us by immediate consciousness. Thus it stands on a basis firmer than that which theoretical knowledge can furnish, and it remains unaffected by the contention and clamor of metaphysical discussion.

The moral law is *imperative*: consciousness reveals it to us as commanding, not merely as persuading or advising. Its command may be *categorical*, as, Thou shalt not lie! or *hypothetical*, as, If you wish to become a clergyman you must study theology. The *categorical imperative* is, however, the characteristic expression of the moral law, and it is only in the authoritative though "hollow" voice of the universal categorical imperative, So act, etc., that the moral law speaks with all the authority of a universal and necessary moral determinant.

The moral law is the form which imparts to the contents of an action its goodness. The contents may be good relatively; the will, which is the form, is an absolute good. "Nothing," Kant observes, "can be called good without qualification except a good will." Effects and circumstances are not, therefore, of themselves, determinants of moral value: the sense of duty is alone praiseworthy. The only moral motive is respect for

¹ Falckenberg, *op. cit.*, p. 316 (English trans., p. 388), calls attention to Kant's identification of will with practical reason.

the moral law. Thus does Kant carry his reverence for the moral law to the extreme of *purism*, — the exclusion of all egotistic motive as derogatory to the moral worth of actions.

The moral law is *unconditional*; in the form of the categorical imperative, its voice is unconditionally authoritative and its command is unconditionally a law of human conduct. It speaks to us immediately, for we are conscious of its commands. Here, then, we have found something which metaphysicians have sought in vain, — an incontrovertible truth on which the freedom of the will, the existence of God, and the immortality of the soul may be made to rest.

First, the *will is free*; for the moral law, in saying Thou oughtest, implies that Thou canst. We have no immediate consciousness of freedom, but we have immediate consciousness of the moral law which implies freedom. I can because I ought, and I know that I can because I know that I ought. Freedom is, therefore, the *ratio essendi* of the moral law, and the moral law is the *ratio cognoscendi* of freedom.¹

Secondly, the moral law postulates the *existence of God*; for the imperative nature of the moral law implies that there exists somewhere a good which is not only supreme but complete (*consummatum*), an embodiment, so to speak, of that perfect holiness which is the sum of all the conditions implied in the moral order. Thus, while theonomic ethics *supposes* the existence of God, autonomic morality *proves* His existence.²

Thirdly, the moral law postulates the *immortality of the soul*. Theoretical reason, as we have seen, fails to determine in any manner the noumenal reality of the subject of our conscious states; but surely the practical reason, which imposes its law so imperiously, is a noumenal reality, of which its every action is a determination. Thus, the soul is immortal because immortal duration is alone sufficient for the complete fulfillment of the moral law. The highest perfection that we can attain in this

¹ Cf. *Kritik d. Prakt. Vernunft, Werke*, II, 132 ff.

² *Op. cit.*, II, 149 ff.

life is *virtue*, and virtue is essentially incomplete : it is a striving towards *holiness*, with a residual inclination towards unholiness. Since the moral law will always continue with the same unrelenting imperativeness to urge the soul towards holiness, and since the inclination towards unholiness will never be completely overcome, the struggle between the desire to obey and the impulse to transgress the law must continue forever.¹

The three postulates of the moral law restore, therefore, freedom, immortality, and theistic belief, which find no justifiable basis in the speculative reason. But which are we to believe, the theoretical or the practical reason? Kant does not hesitate to reply : we are to believe the practical reason, for it is supreme. Faith is a rational conviction based on the sense of duty, and is not less but rather more valid than the conviction based on theoretical knowledge.

This is not the place to take up Kant's theory of natural religion. It is sufficient to note that, as the principle enunciated at the end of the preceding paragraph implies, religion, according to Kant, is based on ethics. We come, then, to the third of Kant's philosophical critiques.

Critique of the Faculty of Judgment. The understanding (pure reason) is the faculty of *a priori* forms and principles of knowledge. Practical reason is the faculty of *a priori* principles of action. Mediating, as it were, between these is judgment (in the stricter sense of the word), which is the faculty of the *a priori* forms and principles of æsthetic feeling. In other words, the *beautiful*, or *purposive*, which is the object of judgment, is intermediate between the true and the good, which are the objects of pure reason and practical reason respectively. *Judgment* may be defined as the faculty by which we subsume the particular under the universal (law), or find the universal under which the particular is to be arranged. It refers the manifold to the one, the sensible order to the supersensible

¹ *Op. cit.*, II, 146 ff.

principle of *design*; and since all actualization of design produces in us the sentiment of the *beautiful*, the faculty of judgment is also concerned with the æsthetic aspect of nature and art. We have, then, as divisions of the critique of judgment, (1) critique of the teleological judgment, and (2) critique of the æsthetic judgment.

A. Critique of the Teleological Judgment. The *analytic* of the teleological judgment has for its scope to determine the different kinds of *adaptation*. These, Kant observes, are two, *external* and *internal*. External adaptation, such as that of the pine to the soil on which it grows, may be explained by mechanical causes; but internal adaptation, which is found in organic structure and function, cannot be explained by mechanical causes alone. There is in the organism a relation of part to part and of part to the whole, but no causal relation to anything outside the organism; so that the organism is at once cause and effect. We cannot explain organic activity in terms of mechanical causality; we can understand it only on the supposition that organisms act *as though* they were produced by a cause which had a purpose in view. The teleological concept is, therefore, regulative of our experience.

That the teleological concept is merely regulative, not constitutive, of experience appears from the *antinomy*, of which Kant treats in the *dialectic* of the teleological judgment. The antinomy is as follows: *Thesis*: All productions of material things and their forms may be explained by mechanical causes. *Antithesis*: Some products of material nature cannot be judged possible unless we suppose a final cause. Now, as doctrines, mechanism (as opposed to teleology) and teleology are irreconcilable; but as rules or maxims *regulative of our experience*, one is supplementary of the other.¹

B. Critique of the Aesthetic Judgment. The name judgment applied to the æsthetic faculty is evidence of the purpose of this

¹ *Op. cit.*, II, 262.

portion of Kant's philosophy, the purpose, namely, to mediate between the sensationalists, who reduced beauty to mere feeling, and the rationalists, who removed all feeling from the faculty of æsthetic appreciation.

a. In his *analytic* of the æsthetic judgment, Kant determines that, as to *quality*, the beautiful is the object of disinterested satisfaction (wherein it differs from the agreeable and the good); with regard to *quantity*, it pleases universally (wherein it differs from the agreeable); with regard to *relation*, it is not based on concepts (wherein it differs from the good, that being beautiful in which we find the form or design without representing to ourselves any particular design); finally, with regard to *modality*, it pleases necessarily (wherein again it differs from the agreeable). That, then, is *beautiful*, which *universally and necessarily gives disinterested pleasure without the concept of definite design*. The satisfaction which we find in what is perfect is intellectual or conceptual; the satisfaction which the beautiful affords is emotional or æsthetic.¹

The *sublime* is that which is *great beyond all comparison*; it gives satisfaction by its boundless and formless greatness, as the beautiful does by its definiteness of form. This greatness is either extensive in space or time or intensive in force or power. The great produces, it is true, a "humiliating" impression; but it is the sensitive nature that is humiliated, while at the same time the spiritual nature is exalted and carried out towards the idea of the Infinite, which the sublime always suggests.²

b. In the *dialectic* of the æsthetic faculty, Kant insists that the highest use of the sublime and beautiful is their use as a *symbol of moral good*. For the æsthetic feeling is akin to the moral faculty, as indeed the teleological judgment also is. The question of the objective value of one or other of these faculties leads ultimately to the assertion that there is hidden in nature

¹ *Kritik der Urtheilskraft*, *Werke*, II, 41 ff.

² *Op. cit.*, II, 92 ff.

a principle of beauty and purpose and goodness which the speculative reason cannot formulate.¹

Historical Position. Kant's influence on the development of thought in the nineteenth century can hardly be overestimated. His philosophy is, as it were, the watershed from which streams of thought flow down in various courses into modern idealism, agnosticism, and even materialism. To this source may also be traced some of the most noteworthy currents of contemporary religious thought, especially the movement towards non-dogmatic Christianity; for it is not difficult to see in Kant's assertion of the supremacy of the moral law the origin of the tendency to regard Christianity more as a system of ethics and less as a system of dogmatic truth. Kant influenced not only the literature of his own country, to an extent unequaled perhaps in the history of that literature, but also, through his English exponents, of whom Coleridge was the chief, the literature of the English-speaking world.

Philosophy owes to Kant the energetic assertion of the grandeur of the moral law as the foundation of ethics, and the scarcely less energetic assertion of the essential unity of consciousness, as a point of view for the critical analysis of mental processes. Whether or not we admit with McCosh that "Kant was distinguished more as a logical thinker and systematizer than as a careful observer of what actually takes place in the mind,"² or with Huxley that "his baggage train is bigger than his army, and the student who attacks him is too often led to suspect that he has won a position when he has only captured a mob of useless camp-followers,"³ we cannot deny that Kant revolutionized the world of speculative and practical thought by introducing a new point of view for the study of mental phenomena, and that, to this extent at least, he is, as he himself claimed to be, the Copernicus of mental science.

¹ Cf. B. Erdmann, *Die Stellung des Dinges an sich in Kant's Ästhetik und Analytik* (Berlin, 1873). ² *Realistic Philosophy*, II, 197. ³ *Hume*, p. 80.

Kant inaugurated transcendental criticism. Now, criticism in the sense of a critical examination of experience, or the analysis of common consciousness, is undoubtedly the beginning of philosophical inquiry, and the critical investigation of knowledge is a starting point which philosophic method approves. But philosophic method cannot approve the attempt to criticise all knowledge without the aid of principles or standards of criticism, and such principles or standards Kant does not pretend to adopt. We cannot regard as a canon of criticism the assumption that what is necessary and universal in our knowledge must be *a priori*, — an assumption which is untrue as to content. Yet it is to this assumption that Kant constantly recurs in his doctrine of categories, in his classification of certain judgments as synthetic and *a priori*, etc. It is only in the practical order, in the realm of moral consciousness, that Kant finds refuge from the pan-phenomenalism which he wishes to avoid; for the thing-in-itself, the subject, and God, though existing, are unknown and unknowable, as far as the speculative reason is concerned. Kant, whose express purpose was to deliver philosophy from scepticism, might well look back at Hume, the sceptic, and exclaim, "There, but for the categorical imperative, goes Immanuel Kant!"

CHAPTER LXIV

GERMAN PHILOSOPHY (*Continued*)

Kant's philosophy was opposed by the exponents of Wolffian dogmatism, such as **Eberhard** (1739–1809), by the sceptic **Schulze** (1761–1833), by the eclectic **Herder** (1744–1803), and by the Fideists, **Hamann** (1730–1788) and **Jacobi** (1743–1819). It was defended and developed by **Reinhold** (1758–1823), who was successively a Jesuit novice, a member of the Barnabite order, a member of the staff of the *Deutscher Merkur*, and professor

of philosophy at Jena and Kiel. With Reinhold are associated **Salomon Maimon** (1756–1800), **Krug** (1770–1842), who was Kant's successor at Königsberg, and **Beck** (1761–1840), who, like Fichte, attempted to give greater systematic unity to the Kantian system. The poet **Friedrich Schiller** (1759–1805) contributed to popularizing the moral and æsthetic doctrines of Kant.

THE ROMANTIC MOVEMENT

The romantic movement corresponded with the beginning of the era of national reconstruction in Germany and was not without effect on the development of philosophic thought in that country. It accentuated the importance of the spiritual life not only of the individual, but of the race, and even in a certain analogical sense of nature itself. **Jean Paul Richter** (1763–1825), whose dialogue on the immortality of the soul, entitled *Kampanerthal*, is less widely known than it deserves to be, is one of the first of the romanticists, or, as some prefer to consider him, a forerunner of the romantic movement.¹ After passing through different phases of subordination of individual spiritual progress to the general spiritual concept of nature, romanticism reached its final form in the writings of **Novalis** (Friedrich von Hardenberg, 1772–1801). **Friedrich Schlegel** (1772–1829), author of *Lucinde*, turned ultimately from the cultus of genius to the profession of the Catholic faith, where he found that emancipation from the limitations of the commonplace which he had in vain sought in romanticism.

It was **Fichte** who imparted to the Kantian system its highest systematic unity, and at the same time combined the many and diverse elements of romanticism in his assertion of the supremacy of the inner consciousness and inner spiritual life of the individual.

¹ Cf. Francke, *Social Forces in German Literature* (New York, 1897), pp. 402 ff.

FICHTE

Life. Johann Gottlieb Fichte was born at Rammenau in Upper Lusatia in 1762. After studying at Meissen and at Pforta, he took a course of theology at Jena and Leipzig. From 1788 to 1790 he lived at Zurich as family tutor. In 1791 he went to Königsberg, and it was through Kant's influence that he was enabled to publish, in 1792, his *Versuch einer Kritik aller Offenbarung*. After that he published several political treatises. In 1794 he obtained the chair of philosophy at Jena and published his *Wissenschaftslehre*. On being dismissed from the University of Jena, he lectured successively at Berlin, Erlangen, and, for a brief interval, at Königsberg. In 1808 appeared the famous *Reden an die deutsche Nation*, and when, in 1810, the University of Berlin was founded, Fichte was appointed to a professorship, which he held until his death in 1814.

Sources. Fichte's complete works were edited by his son, J. H. Fichte, in 1845-1846. Several of Fichte's more important treatises were translated by Dr. William Smith under the title, *Fichte's Popular Works* (fourth edition, London, 1889). The *Wissenschaftslehre* was translated by C. C. Everett (*Fichte's Science of Knowledge*, Chicago, 1884), and the *Rechtslehre* by A. E. Kroeger (*The Science of Rights*, London, 1889). Consult Adamson, *Fichte (Blackwood's Philosophical Classics*, Edinburgh and Philadelphia, 1892); A. B. Thompson, *The Unity of Fichte's Doctrine of Knowledge* (Boston, 1895).

DOCTRINES

Starting Point and Aim. Fichte is commonly said to hold to Kant and Spinoza the same relation that Plato held to Socrates and Parmenides. His immediate starting point is Kant's philosophy; his aim is to complete and unify what is incomplete and only partially unified in that system of thought. Kant was well aware that his theory of knowledge as expounded in the *Critique of Pure Reason* was incomplete and lacking in coherent unity, but he was not equally conscious of the lack of a logical and consistent transition from the conclusions of the first critique to the principles with which the *Critique of Practical Reason* and the *Critique of Judgment* begin. It was Fichte's aim, as indeed it was the aim of Schelling and Hegel, to supply

a *single principle*, an all-embracing formula, which should at once complete Kant's analysis of speculative thought and afford a systematic and logical basis for the analysis of the data of ethics and æsthetics. Such a principle Fichte found in the *Ego*, which takes the place of the thing-in-itself as the ultimate reality, and is, moreover, the ultimate in the practical as well as in the speculative order. For, in Fichte's *doctrine of the Ego* we find that *self* does not stand merely for *self-consciousness*, but also for *duty*. When he styled his most important constructive treatise *Wissenschaftslehre* he did not intend to convey the impression that his philosophy is merely an account of the methods of scientific research; he meant rather that it is a science of knowledge, understanding by knowledge the sum total of our experience as it presents itself in consciousness; so that philosophy may be defined as a *rethinking in self-consciousness of the experience which is presented as a completed whole in direct consciousness*.

It is usual to distinguish the earlier and the later forms of Fichte's philosophical system.

Earlier Form. Here we may further distinguish Fichte's theoretical and practical doctrines.

A. Theoretical Philosophy. Thought cannot be reduced to being, but being can be reduced to thought. Similarly, thought cannot be derived from being, but being can be derived from thought. Kant was unsuccessful in his synthesis of knowledge because he tried to deduce the categories and other forms of thought from the logical relations of subject to predicate and, therefore, ultimately from experience. If, on the contrary, we deduce the forms of thought from the nature of consciousness, we shall find that experience and all its noumenal content (the thing-in-itself) are capable of being derived from the conscious activity of the *Ego*,—from the *deed-acts* (*Thathandlungen*) of the thinking subject. Thus the thing-in-itself is absorbed, so to speak, in the subject, and instead of ultimate dualism we have idealistic monism. The *Ego*, and the *Ego* alone, is real. We

need not go beyond experience to find the ultimate reality, but in our analysis of experience we abstract the *Ego*, which is, therefore, transcendental though not transcendent.

The three principles. Taking up now the *deed-acts* of consciousness, we find that in every act of self-contemplation we affirm, or posit, the identity of subject and object, — the self as representing and the self as represented. We have, therefore, the first principle, — “The *Ego* posits itself.” It is hardly necessary to point out that by *Ego* Fichte does not mean the individual, but the universal self-consciousness, the *I-ness* (*Ich-heit*). Take the proposition $A = A$. It posits nothing about A ; for A is for the *Ego* simply and solely by virtue of being posited by the *Ego*. Therefore the *nexus* between A and A is the position of the *Ego*, the affirmation that *I am*.¹ What, considered in the abstract, is the logical law of identity, is, in its application to objects, the (only) category of reality. But if we continue our examination of the facts of empirical consciousness, we find there a certain opposition, which may be expressed in the general formula Not- A is not equal to A (not to be confounded with Not- $A =$ Not- A , which is a case of identity), and if we treat this proposition as we treated the first, we find that it means that in the *Ego* the *non-Ego* is opposed to the *Ego*. Here we have the second principle, — “A *non-Ego* is opposed to the *Ego*.” Now, since the *Ego* is the only reality, it is through the *Ego* that the *non-Ego* is posited and the *Ego* denied. Therefore the *Ego* both posits and negates itself. It is, however, as fundamental for Fichte as it was for Spinoza that *all negation is limitation*. Therefore the *Ego* in part negates the *non-Ego*, and the *non-Ego* in part negates the *Ego*, — which is the third principle. In this *thesis*, *antithesis*, and *synthesis* we find the germ of the Hegelian triadism. It is important to note also that Fichte identifies the *Ego* with self-activity, and teaches that it exists not only *for* itself (*für sich*) but *through* itself (*durch sich*).

¹ *Werke*, I, 98.

From these principles Fichte deduces not only the fundamental laws of thought, but also the fundamental laws of being,—the law of causation, the principle of sufficient reason, etc.

The question, however, remains to be answered, Why does the *Ego* interrupt the unbroken activity by which it posits itself? Why does it posit the *non-Ego*? Fichte, we have already said, regards the idea of duty as no less essential to the *Ego* than the idea of self-consciousness. Taking up, therefore, the moral aspect of the *Ego*, he answers that *effort and struggle* are necessary for the attainment of the highest good. The *Ego* posits the *non-Ego* in order to make effort and struggle possible; the *Ego* is theoretical, in order to be practical: it represents a *non-Ego* in order to act upon it, to overcome its limitations, and thus to make it disappear in the *Ego*. This consideration is the basis of practical philosophy.

B. Practical Philosophy. Without conflict there is no morality. Activity is, therefore, the essence of morality, and inertness is the radical evil. Man should strive to become self-dependent and thereby attain independence and freedom. To this general maxim is added the special rule of conduct for each individual: Always follow the inner necessity which urges you to attain to freedom through action; fulfill your vocation; *act according to your conscience*.¹

Besides this internal necessity (*conscience*), Fichte admits an external necessity, namely *right*, which has exclusive reference to external conduct, just as conscience refers to internal disposition. Although right is external, it originates from the *Ego*; for as in general the *Ego*, in positing itself, posits also the *non-Ego*, so the practical *Ego*, in positing itself as a free agent, posits the *other-self*, the *thou*, as another free agent. From the coexistence of free agents arises the limitation of the freedom of the *Ego*, imposed by the necessity of respecting the freedom of others: this necessity is right. The *law of right* is, therefore,

¹ Cf. Höffding, *op. cit.*, II, 158.

So limit thy freedom that others may be free along with thee. When this limitation is not observed and the freedom of others is infringed, it is the duty of the *State* — not of the individual who is injured — to interfere and enforce the observance of the limitations of freedom. And, as it is the duty of the State to safeguard the rights of its subjects, it is the mission of the *Church* to impress on all men, by means of symbols, the limitations of the individual, and by so doing to deepen and strengthen moral convictions.¹

Later Form of Fichte's philosophy. During the last years of his life Fichte devoted special attention to the political and religious aspects of his philosophy of self-consciousness. His *Addresses to the German Nation* contributed much to the growth of the national ideal among his fellow-countrymen, an ideal which was realized in the educational and political reconstruction of the country during the latter half of the nineteenth century. In the later expositions of the *Science of Knowledge*, he developed his religious philosophy, bringing out into special prominence the truth that in the Deity there is something more than self-consciousness, that in piety there is something more than moral conduct, and that religion is, therefore, something more than philosophy and ethics ; for it is peace and life and blessed love. The *Ego*, which he had identified with God, he now regards as an image of the Absolute (God). Here we see, on the one hand, the influence of Spinoza's pantheism, and, on the other, that of the Christian doctrine of the Logos.

Historical Position. Fichte's system is the first of a series of post-Kantian efforts to reduce the incomplete synthesis which Kant had effected to a more compact and coherent form by substituting the unity of a single formula for the Kantian trinity of *idea*, *thing-in-itself*, and *subject*. The formula which Fichte proposed was the *Ego*. From this he deduced all thought and all being, including the thing-in-itself ; and from the *Ego* he

¹ *Op. cit.*, II, 160.

derived all reality, as the Neo-Platonists had derived it from the one, and Spinoza from the substance. His philosophy is, therefore, monistic. It may be styled a system of subjective idealism, or pan-egoism, if when we use the term *pan-egoism* we remember Fichte's protest against identifying the *Ego* with individual self-consciousness. Fichte's relation to Kant and his place in the romantic movement are evident in his doctrine of the essentially ethical aspect of the activity of the *Ego*,—the inclusion of duty, or spiritual activity, as well as conscious representation, in the notion of self.

SCHELLING

Life. Friedrich Wilhelm Joseph (von) Schelling was born at Leonberg, in Würtemberg, in 1775. At the age of sixteen he entered the theological seminary at Tübingen, where he studied theology, philosophy, and philology. He spent the years 1796–1797 at Leipzig, where, while fulfilling his duties as tutor to a young nobleman, he studied mathematics and natural science and published his first work, *Ideen zu einer Philosophie der Natur*. In 1798 he was appointed to lecture at Jena, where he had Fichte for colleague. From 1803 to 1841 he taught successively at Würzburg, Erlangen, and Munich. In 1841 he was made member of the Academy of Sciences at Berlin, and lectured at the university for several years. He died at Ragatz in Switzerland in 1854.

Sources. Besides the *Ideen*, Schelling wrote several treatises on the philosophy of nature. He contributed to the philosophy of religion and of mythology several important treatises. The most systematic of his works is *Der transcendente Idealismus*, published in 1800. His works were collected and published in fourteen volumes by his son (Stuttgart and Augsburg, 1856 ff.). Consult Watson's *Schelling's Transcendental Idealism* (Griggs' *Philosophical Classics*, Chicago, 1882).

DOCTRINES

General Character of Schelling's Philosophy. While Schelling was a student at Tübingen, his favorite authors were Kant, Fichte, and Spinoza; later he came in contact with Hegel, and was impelled, by way of reaction against Hegel's naturalism,

to turn for inspiration to the mysticism of the Neo-Platonists and of Jakob Böhme. Herder and Giordano Bruno also left traces of their influence on his philosophy. Schelling was at first a disciple of Fichte, but he subsequently transferred his allegiance to different schools in succession, and since, as Hegel said, he "carried on his studies in public," he expounded successively at least five different systems.

First System. Previously to the publication of the *Ideas for a Philosophy of Nature* (1797) Schelling adhered to the doctrines of Fichte.

Second System. During the years 1797–1800, the most productive period of his literary life, Schelling expounded a philosophy of nature and a transcendental philosophy of spirit.

1. *Philosophy of Nature.* Fichte regarded nature as merely a limitation of the *Ego*, as at most a means to the exercise of man's spiritual and moral activity; Schelling advocates the recognition of *nature as a source of spiritual activity*. He teaches that nature is not merely object but also subject, not indeed a subject fully conscious, or completely awake, but semi-conscious and slumbering. We should therefore study nature in order to discover the laws by which spirit is developed out of nature into self-consciousness. For nature is not the antithesis of spirit, both being the products of a higher principle which posits nature (wherein it reflects itself imperfectly) and through nature attains to spirit (where it reflects itself consciously, and to that extent adequately).¹

Empirical physics regards nature as mere being, or product; speculative physics (the philosophy of nature) looks upon nature as becoming, or productive. But, just as Fichte recognized the limitations of the activity of the *Ego*, Schelling limits the productivity of nature by positing its essential *polarity*. If, he observes, there were no arrest of productivity, nature would continue striving towards the Infinite, and there would be no

¹ Cf. Falckenberg, *op. cit.*, p. 364 (English trans., p. 448).

product ; there is, therefore, a retarding as well as a stimulating force. All nature is dual ; the magnet, with its union of opposite polar forces, is the symbol of the life and productive activity of nature. In an essay entitled *On the World-Soul* (1798), Schelling developed the idea of an animated nature pervaded by an organizing principle, which originates and maintains the conflict of contending forces. Hence the inorganic is to be explained by the organic, and, in general, *the lower by the higher*.

2. *Transcendental Philosophy of Spirit*. The philosophy of spirit concerns itself with the phenomena of the spirit as they manifest themselves in representation, action, and artistic enjoyment. We have, therefore, three divisions of transcendental philosophy.

(a) *Theoretical philosophy*. Here we start with self-consciousness and proceed to explain how it is that we represent to ourselves certain images of external reality, or, in other words, how it is that in the act of representation we feel compelled, as it were, by an external something, to represent in a certain manner. The general explanation is that *there are two opposing forces*, the one real and the other ideal, which by their alternate action limit the spirit to the state of sensation, then to that of reflection, and finally to that of volition, which is at once the culmination of the theoretical life and the beginning of the practical life of the spirit.

(b) *Practical philosophy*. Here we start with impulse, which arises from the theoretical activity of the spirit positing the distinction between self and not-self, and which differs from that theoretical activity by a mere difference of degree. Progress in moral life means the gradual overcoming of the *non-ego*, and the final goal of moral striving is *complete independence of the ego as will*. It is only in the initial concept of nature as *reproduced*, not *produced* by the *ego*, and in the "supplementary" considerations on law, state, and history, that Schelling

differs from Fichte in his practical philosophy; both identify moral life with independence.

(c) *Æsthetic philosophy*. In the theory of art Schelling introduces Kant's notion of the beautiful, modifying it, as he modified Kant's teleological concept, to suit the needs of his more compact idealistic system. The *beautiful*, he teaches, is *the perfect realization of the union of the subjective and objective*,—a union to which history approximates, but which art accomplishes. In art the antithesis between the real and the ideal, between action and representation, between impulse and reflection disappears. *Art* is, therefore, *the solution of all the problems of philosophy*.¹

Third System. So far Schelling may be said to have extended and modified the subjective idealism of Fichte by distinguishing the philosophy of nature from that of spirit, and by recognizing as the *prius* of both nature and spirit a common ground or principle from which both are deduced. In his third system he emphasizes the importance of this principle, which he calls the *Absolute*, and which he defines as the *identity of the real and the ideal*.² Here the line of thought and even the method and manner of exposition are Spinozistic. To the philosophy of nature and the transcendental philosophy of spirit, which still remain as integral portions of the system, there is added the *philosophy of identity*, in which all things are viewed *sub specie æterni*, and are thus led back to the Absolute, God, in Whom they are identified. It is important, however, to note that the identification of the real and the ideal in the Absolute is complete, not because of the power of the Absolute to develop the real and the ideal, but because of its *indetermination*. On account of this indetermination Schelling's Absolute was compared by Hegel to the night in which all cows are black.

¹ Cf. *op. cit.*, p. 370 (English trans., p. 456).

² Cf. Windelband, *History of Philosophy* (trans. by Tufts, New York, 1901), p. 608.

In the derivation of the real from the Absolute we are to distinguish *three moments: gravity, light, and organization*. The organic concept of nature is, however, preserved; for even in the first moment organization is present, inasmuch as the inorganic is the residuum of the organic, — that which failed to attain complete organization.

Fourth System. In the fourth system Schelling, after the manner of the Neo-Platonists, accounts for the origin of the universe by a “breaking away,” or “falling off,” from the Absolute. In the previous system the world was swallowed up, so to speak, in the indifference of the Absolute; now it is placed in striking contrast with it, and the independence of the Absolute is emphasized. We find in this fourth system a fuller and deeper realization of the *problem of evil*, and at least an implied confession of the inability of monism to account satisfactorily for the existence of evil in the world.

Fifth System. This may be briefly described as a theogony and cosmogony after the manner of Jakob Böhme.¹

Historical Position. Schelling's philosophy is deserving of careful study both by reason of its intrinsic importance and of the influence, direct and indirect, which it exerted on other systems. It offers, however, more than usual difficulty because of the wealth of imaginative power which Schelling brought to bear on even the most abstruse problems of metaphysics, and also because of the successive change of view in the five periods into which his mental history is divided. Taking the third system, the philosophy of identity, as the most typical stage in the development of Schelling's thought, we may describe it as a system of idealistic monism in which subject and object are identified in the indifference of the Absolute. Thus it stands contrasted, on the one hand, with the subjective idealism of Fichte, and, on the other, with the dynamic idealism of Hegel, who identified subject and object in an Absolute which is

¹ Cf. Höffding, *op. cit.*, II, 171, 172.

universal, not because it is indifferent, but because in it all differences are immanently contained.

Before we pass to the study of Hegel, mention must be made of the disciples and co-workers of Schelling, who represent different phases of his philosophy of nature and his philosophy of religion. Among the *naturalists* influenced by Schelling are **Steffens** (1773–1845), **Oken** (1779–1851), **Schubert** (1780–1860), and **Carus** (1789–1869), all of whom were distinguished in their day as biologists, physicists, or psychologists. Among the *philosophers of religion* whom Schelling influenced, the two best known are **Baader** (1765–1841), who, from the Catholic standpoint, attempted a religio-philosophical synthesis of Neo-Platonism, Scholasticism, post-mediaeval mysticism, and German transcendental philosophy, and **Schleiermacher** (1768–1834), who, from the Protestant standpoint, endeavored to combine the most varied elements in an eclectic philosophy of religion.

CHAPTER LXV

GERMAN PHILOSOPHY (*Continued*)

HEGEL

Life. Georg Wilhelm Friedrich Hegel was born at Stuttgart in 1770. His life, like that of all the great post-Kantian philosophers, is merely the history of his academic and literary career. At the age of eighteen he entered the theological seminary at Tübingen, where he devoted himself to the study of Kant and Rousseau, having for companions Schelling and the young poet Hölderlin, whose enthusiasm for Greek poetry he fully shared. The years 1793–1800 he spent as private tutor at Berne and at Frankfurt-am-Main; years in which, through the study of Hellenic literature, he attained a realization of the spiritual significance of nature as the key to the harmony of existence. In 1801 he entered the University of Jena, and, after a few years spent there as *Privatdocent*, was appointed professor extraordinary (1805). While at Jena he renewed his acquaintance with Schelling, who was at that time editor of the *Critical Journal*

of Philosophy. Soon, however, divergence of opinion between the two great opponents of Fichte's subjectivism led to the development by Hegel of a system opposed to the philosophy of identity; in 1807 he published his *Phänomenologie des Geistes*, his first important contribution to speculative philosophy. After spending a year as newspaper editor at Bamberg, Hegel became rector of the gymnasium at Nuremberg, and while there published his *Logik (Wissenschaft der Logik, 1816)*. In 1816 he was made professor of philosophy at Heidelberg, and in 1818 was transferred to the University of Berlin. While at Heidelberg he published the *Encyclopædia (Encyklopädie der philosophischen Wissenschaften im Grundrisse, 1817)*. He died at Berlin in 1831.

Sources. Hegel's works were published soon after his death (Berlin, 1832 ff.), in nineteen volumes, the last volume being the life of Hegel written by Rosenkranz. The *Journal of Speculative Philosophy* (Vols. I-V, St. Louis, 1867-1871) published translations of the *Phänomenologie* and of portions of the *Encyklopädie*. The *Logik* was translated by W. T. Harris, and is to be found in the second volume of the *Journal* just referred to. Wallace has published translations of the most important portions of the *Encyklopädie* (*The Logic of Hegel*, Oxford, 1892, and *Hegel's Philosophy of Mind*, Oxford, 1894). The translation of the *Vorlesungen über die Philosophie der Geschichte*, by Sibree, is published in Bohn's Library (*Philosophy of History*, London, 1860, 1884).

Professor Caird's *Hegel (Blackwood's Philosophical Classics*, Edinburgh and Philadelphia, 1896) will be found very useful by those who are not prepared to take up Stirling's formidable exposition, *The Secret of Hegel* (2 vols., London, 1865; 1 vol., Edinburgh and London, 1898). *Mind*, especially in the new series, contains many valuable articles expository and explanatory of Hegelian philosophy.¹ See also Fischer's *Hegel* (Heidelberg, 1898-1901).

DOCTRINES

The Problem of Philosophy. Thus far, in following the course of the development of philosophic thought in Germany, we have

¹ For instance, N.S., Vols. III and IV (1894-1895), *Time and Hegelian Dialectic*, and Vol. VI (1897), *Hegel's Treatment of the Subjective Notion*. On Hegelian terminology, cf. *Dictionary of Philosophy and Psychology* (ed. Baldwin), article, "Hegel's Terminology." Consult also Seth, *Hegelianism and Personality* (second edition, London and Edinburgh, 1893), Morris, *Hegel's Philosophy of the State and of History (Griggs' Classics*, Chicago, 1887), and Hibben, *Hegel's Logic* (New York, 1902).

found that Kant, by failing to complete the synthesis of ultimate reality, bequeathed the problem towards the solution of which all post-Kantian speculation was directed. Fichte completed the synthesis by merging the thing-in-itself (object) in the activity of the Ego (subject). Schelling tried to effect a synthesis equally complete by merging both subject and object in the indifference of the Absolute. Hegel now approaches the problem anew. Dissatisfied with Schelling's solution of the problem, he proposes to substitute for the Absolute of indifference an Absolute of immanent activity. According to Schelling, nature and spirit (object and subject) *proceed from* the Absolute; according to Hegel, the Absolute *becomes* successively nature and spirit. The Absolute of Hegel's speculative system is a *process* rather than a *source*; it is infinite, but, unlike the Spinozistic substance, it is *an infinite of activity, opposition, and tension*, rather than of static immensity and undifferentiated plenitude; it is a maelstrom rather than a sea of unruffled rest.

This concept of the Absolute is Hegel's starting point; but we can understand neither his starting point nor his method unless we first obtain a clear conception of *the frame of mind* in which he approaches the problems of philosophy. In Fichte, as in Kant, the ethical character predominated, and in Fichte's philosophy the practical reason retained its supremacy. In Schelling it was the scientific-artistic character that prevailed, and in his philosophy the real and the ideal, the rational and the imaginative, were given equal play. *In Hegel, the rational, or idealistic, temperament is predominant*; in his vast philosophical synthesis the theoretical is placed supreme above the practical, and action is subordinated to thought, for thought is the center and sum of reality: "the rational alone is real"; "all being is thought realized, and all becoming is a development of thought." Mere science, he observes, looks for the causal explanations of phenomena; philosophy seeks to find the ideal interpretation of

phenomena, to understand them in terms of the Absolute, which is thought.

As to *content*, therefore, *philosophy does not go beyond experience*; it is, to repeat Kant's distinction, transcendental but not transcendent. Indeed, it cannot go beyond rational experience, since the rational alone is real, and philosophy must necessarily be in harmony with actuality and experience.¹ As to *form*, however, philosophy differs from the empirical sciences; for, to the laws, classifications, and categories of these sciences it adds the categories of notion, being, essence, etc. In logic, as we shall see, these categories are studied, as it were, *in vacuo*, that is, devoid of all empirical content; but in the philosophy of nature and in the philosophy of mind they are studied in their development and determination. Logic is, nevertheless, a science of reality, for in it reality is studied *through* the abstract categories.

Hegel's is a *critical philosophy*; yet it is, at the same time, systematic or constructive. It is, as Wallace says, "a system which is self-critical and systematic only through the absoluteness of its criticism;"² or, to use Hegel's own phrase, it is "an immanent and incessant dialectic."

Briefly, then, Hegel's philosophy is *idealism* in the absolute sense of the word, — logical or conceptual rather than ethical or scientific. It is a *philosophy of identity*, inasmuch as it looks upon nature and spirit as manifestations of a higher Absolute. It is a *philosophy of development*, inasmuch as the Absolute from which it deduces nature and spirit is not a static but a dynamic *prius*. This dynamic *prius* of nature and spirit is the process from *in-itself* (*an-sich*) through *out-of-self* (*fürsich*, *Anders-sein*) to *for-itself* (*an-und-fürsich*).

Before passing to consider Hegel's method it is necessary to emphasize the importance of *the idea of development* and to explain the principle which governs all development, whether

¹ *Logic*, p. 10. References are to Wallace's translation (Oxford, 1892).

² *Hegel's Philosophy of Mind*, p. xvi.

in the purely logical order or in nature and mind. In its barest statement, the principle is that all development passes through three stages, — *in-itself*, *out-of-self*, and *for-itself*. This may be called a metaphysical application of the maxim on which the mystics insist, namely, "Die to live." For it pertains to the very essence of spirit that through disintegration it must attain to reintegration, through diversity to unity, through strife to peace, through opposition to agreement. It is a law of thought as well as a law of being (and thought is being) that *a concept or a thing realizes itself by going out from itself* (losing itself in the other) *and returning to itself*. To take one of Hegel's favorite examples: Freedom is developed by discipline, which is its opposite. The freedom of the child is surrendered in the discipline of education in order to become the mature freedom of the man, and the freedom of the man is in turn surrendered in the discipline of law in order to become the freedom of the citizen.

Hegel's Method is to be understood in the light of this principle of development. Fichte, while admitting in theory that philosophic method consists in the use of *thesis*, *antithesis*, and *synthesis*, failed to develop this idea of method and to apply it to every department of thought. Schelling relied on *intuition*, and gave free scope to his exuberant imagination. Hegel insists on the pruning of the imaginative faculty and the discussion of all intuitions by means of *dialectic*. Philosophy, he observes, being the *thinking study of things*, does not stop at the intuition which presents the thing (object) in its immediate unity, for that is only part of the truth, but follows it out into the self-mediation whereby it passes into its opposites and back again to reconstructed unity. Philosophy, therefore, must pursue a concept or an object from its immediate unity into the divergence of opposites, so as to arrive at the full truth in the reconciliation of opposites. For "all position is negation" (every concept contains its opposite), and "all negation is position" (every

opposite contains that to which it is opposed); so that neither in affirmation nor in negation is there the full truth, but in the reaffirmation which follows affirmation and negation. Here we have the famous dialectical method, the *triadism* which determines the division as well as the method of Hegel's philosophy.

It is important to note here that "At least the first and third category (the *in-itself* and *for-itself*) in every triad may be looked upon as *definitions of the Absolute, or metaphysical definitions of God*, — the first where the thought-form of the triad is formulated in its simplicity, and the third being the return from differentiation to a simple self-reference. The second sub-category (the *out-of-self*) in each triad, where the grade of thought is in its differentiation, gives, on the other hand, a *definition of the finite*." ¹

We shall find as we proceed triad within triad. The first great triad is *Idea, nature, and spirit*, which gives us the division of philosophy.

Division of Philosophy. Philosophy starts with the Idea. It is scarcely necessary to remark that the term Idea does not here designate a phenomenon of the individual consciousness, but the system of reason, the sum of reality. Now the Idea, following the law of development, is at first *in-itself* (*an-sich*), then *outside-itself* (*fürsich, Anders-sein*), and finally, *for-itself* (*an-und-fürsich*). There are, therefore, three parts of philosophy: (1) *logic*, the science of the Idea in itself; (2) *philosophy of nature*, the science of the Idea outside itself, or in the state of otherness; (3) *philosophy of mind*, the science of the Idea come back to itself out of otherness.² In each of these divisions there are subordinate triadic divisions, so that each part is a circle rounded and completed in itself, while philosophy as a whole resembles a circle of circles.³

1. **Logic** is the *science of the pure Idea*. This does not mean that logic is the science of the forms of thought, or that it is

¹ *Logic*, p. 156.

² *Op. cit.*, p. 28; *Werke*, vi, 26.

³ *Logic*, p. 24.

the science of mere thought. It is the science of reality ; for the Idea is the sum of reality, — the synthetic unity of experience. Logic differs from the other parts of philosophy merely in this, that it is the science of reality looked at through the medium of pure or abstract thought. If, then, logic is the “morphology of thought,” Hegelian logic is the morphology of the world, of life, of reality. As Hegel himself says, “Logic coincides with metaphysics, the science of things set and held in thoughts.”¹

It is important to remark here that the *identification of logic with metaphysics* necessitates a change in the meaning of the word “category” and in that of the phrase “deduction of the categories.” The forms of thought are for Hegel what they were for none of his Kantian predecessors, forms of being in a sense akin to that which the schoolmen attached to *substantial forms*, although, of course, they differ radically from the Scholastic forms inasmuch as they are wholly dynamic processes rather than static entities conceived after some remote analogy to a mold or die. If, then, the categories are processes of being as well as forms of thought, the deduction of the categories will be the tracing of their genealogy from the first form, which is Being. It will not be enough to enumerate the categories and to indicate their systematic articulation ; it will be necessary to discover and demonstrate their genetic connection, their functional dependence, so to speak, on one another. Logic is not only the *morphology*, it is also the *physiology of thought*.

It is important to note also that neither in the logic nor anywhere else in Hegelian philosophy are the categories discovered. The task of discovering the categories belongs to experience and to the empirical sciences. The categories being *given*, philosophy shows how they grow out of each other and are phases of the same reality. Philosophy not merely enumerates them, for that would be simply a *mechanical* synthesis ; it also shows their

¹ *Op. cit.*, p. 45.

functional interdependence and interconnection, thus effecting an *organic* synthesis.

Logic is divided into (A) *Doctrine of Being (Sein)*, that is, of the Idea in its immediacy ; (B) *Doctrine of Essence (Wesen)* that is, of the Idea in its reflection or mediation ; (C) *Doctrine of Notion (Begriff)*, that is, of the Idea returned to itself. Being is the notion implicit, or in germ ; essence is the show or appearance (*Schein*) of the notion, and the notion is Being or Idea in and for itself.¹

A. Doctrine of Being. Logic begins with Being, because Being is, on the one hand, pure thought, and, on the other, immediacy itself, simple and indeterminate. Now, if Being is complete indeterminateness, it is identical with Nothing (*Nichts*). Let us see what Hegel means by the famous formula *Being = Nothing*. He means that, while there is undoubtedly a distinction between Being and Nothing, *the distinction is not absolute but only relative*. When Aristotle enunciated the principle of contradiction, he gave expression to what is only part of the truth. For, if it is true that every object and every thought is differentiated from every other object and every other thought, and is therefore identical with itself (A is not Not-A, A = A), it is no less true that every object and every thought is related to every other object and every other thought, and that, in so far as it is related to another, it is differentiated from itself and identical with that other (A is not A, A = Not-A). Aristotle, emphasizing one aspect of thought, namely its differentiating power, and failing to realize the equal importance of the relating power of thought, formulated the principle of contradiction — the differentiation of things — as if it were an absolute truth, whereas it is only relative to one aspect of thought and being. Looking at thought and being *from the view point of totality*, we see that the absolute differentiation or the absolute identity of concepts or of things is but part of the truth, the whole truth

¹ *Op. cit.*, p. 155.

being that concepts and things are *partially differentiated and partially identified*. We have consequently as much right to say that Being is Nothing as that Being is Being, since the whole truth is that Being is both Being and Nothing, — it is *Becoming* (*das Werden*). Here we have the barest and most abstract form of development by means of the union of opposites. Becoming is, as Hegel himself says, a *poor* term (meager of content). *Life* and *mind* are higher, richer, more intense unions of opposites than is mere *becoming*, which, however, is the abstract formula of life and mind.

The result of the union of Being and Nothing in Becoming is, first, the process itself, — an endless swaying, a constant tension; and secondly, at each stage of the process, a product, so that to Being identical with Nothing succeeds *determinate being*, or what we call *something*, or *being-then-and-there* (*Dasein*). Now the determinateness of Being is, in its immediacy, *quality*, from which are deduced the categories *otherwise-being*, *negation*, *limit*, *alteration*, *being-for-self*, which is the one with its *attraction* and *repulsion*; but in attraction and repulsion the one annuls itself and its determinates, becoming the *many*; at this point, therefore, *quality* passes over into *quantity*.

Quantity is defined as "pure Being where the mode or character (quality) is no longer taken as one with the being itself, but explicitly put as superseded or indifferent." Quantity arises from a unit and the identification or equalization of (other) units.

Completing now the triadic circle within pure Being, we have *measure* (*Mass*) as *the union of quality and quantity*. In measure these two are united (so, for example, progressive diminution in temperature causes a transition from heat to cold); for quantity is implicitly quality, and quality is implicitly quantity.

Being which is thus determined by quality, quantity, and measure becomes essence, or, in other words, the determinations quality, quantity, and measure being transitory, the result of their dialectic is essence.

B. Doctrine of Essence. *Essence (Wesen)* is defined as Being coming into mediation with itself through the negativity of itself. Being, as we have seen, is immediate in its self-identity; now when this immediacy is "deposed," Being is reduced to a reflected light, and essence is Being thus reflected on itself.¹ As reflection supersedes immediacy, essence supersedes Being. The reflection is, however, to be conceived as inward in direction; for the outer "rind or curtain" is Being, and the inner reflection is essence. There is, therefore, a duality here, — the categories of essence come in pairs, as, for instance, essence and appearance, force and expression, matter and form, substance and accident, cause and effect, — a duality which, as we shall see, disappears in the *notion*, wherein the opposite aspects of Being attain final unity.

First, we have *essence* and *appearance*. Immediate Being is now an appearance; yet it is not, as we should say, merely phenomenal, for it is the appearance of an essence, and it is as necessary that the appearance should have an essence as it is that the essence should appear. Life, for example, *must manifest* itself, the cause *must produce* an effect, and at the same time there is no manifestation of life without life and no production of an effect without a cause.

Next, as determinations of essence we have *identity* and *difference*. The unity of these is the *ground (Grund)*, which is defined "the essence put explicitly in totality." At this point essence has completed the circle of self-mediation (reflection), so that we are back again at immediate Being, not at Being in its primitive immediacy, but at Being in an immediacy which results from the annulment of all intermediation. Being, which is immediate in this sense, is *existence*. Developing now the categories of ground and existence into an explicit unity, we arrive at the category of *thing (Ding)*. Thing in its relation to reflection on other things develops the category of *properties*;

¹ *Op. cit.*, p. 207.

and the union of essence with existence, combining all the essential with the existential aspects of Being, gives the form of *actuality*, which is synonymous with *reality*.

Similarly, by processes the details of which it is unnecessary to set down here, the categories *content* and *form*, *power* and *expression*, *inner* and *outer*, *substance* and *accident*, *cause* and *effect*, *action* and *reaction*, are deduced from essence. It is important, however, to note that as substance and accident, so cause and effect (and indeed all the categories which come under the head of essence and appearance) are inseparable. Cause passes over into effect, so that the effect is the cause explicated or manifested, and effect in turn passes over into cause. For the causal series is not a progress *ad infinitum*, the rectilinear movement from cause to effect being bent back on itself so as to form a circle in which every effect becomes the cause of its cause. This *reciprocity* is illustrated in history; for example, the character and manners of a nation influence its constitution and laws, while in turn the constitution and laws of a country influence the character and manners of its people.¹ The category of reciprocity (*Wechselwirkung*) does away with the idea of predetermining fatality, shows that *freedom* is to be found in the concept of absolute but reciprocal necessity, and thus leads to the category of the *notion*.

C. *Doctrine of the Notion*. The *notion* (*Begriff*) is "essence reverted to the immediacy of Being,"² or, since each category is inseparable from its antecedent, the notion is the principle of freedom, the power of substance self-realized. In fact, the notion contains all the earlier categories, and may therefore be defined as the truth of Being and essence. Obviously, then, we may understand the notion to be synonymous with totality fully realized, which is apparently what Hegel means when he says that quality, quantity, force, cause, necessity, freedom are nothing apart from the notion. The dialectical process of Being

¹ *Op. cit.*, p. 284.

² *Op. cit.*, p. 281.

was *transition*, that of essence was *reflection*; the movement of the notion is merely *development*. It is, Hegel tells us, to be looked upon as play, for the other which it sets up is not really an other.

Following this *play* of the notion we find that its triadic development is *subjective notion*, *objective notion*, and *absolute notion*, or *Idea*.

a. Subjective notion is the notion as notion, and as such has three moments, — *universality*, *particularity*, and *individuality*. The meaning is that the notion passes from unity to partition and thence back to the explicit identification of parts in the one. This reintegration is effected by means of *judgment* (*Urtheil*), which, as its name implies, signifies the identification of partition with primary unity, so that the abstract form in which all judgments may be expressed is "The individual is the universal." Now judgment, inasmuch as it affirms the identity of the individual with the universal, contains a contradiction. This contradiction is removed in the *sylogism*. The syllogism is, therefore, the complete expression of the subjective notion, the reintegration of the partitions of the notion in the universal by means of the particular. "Consequently, at the present stage (in the deduction of the categories) the definition of the Absolute is that it is a syllogism, or, stating the principle in the form of a proposition: *Everything is a syllogism*."¹

b. Objective notion. Thus far the notion has been considered in its subjective stage, as it were in the abstract, as form without content; but since it is a form which, in its ultimate development, is a union of opposites, it constantly tends to objectify itself. The notion as object is the totality of objects, — the universe.

Here, as usual, we are to distinguish three forms: *mechanism*, or the juxtaposition of independent objects held together

¹ *Op. cit.*, p. 314.

as an aggregate; *chemism*, or the mutual attraction, penetration, and neutralization of objects (elements) held together by affinity; and *organism*, or the complete unity of purposive action in which the independence of the objects (body cells) disappears and parts are made to serve the purpose of the entire structure.

Now, notion become object implies a contradiction; for as subjective notion was form without content, so the object, as object, is content without form. The *play* of the notion has here reached a point where the notion is not a notion. The contradiction, however, disappears in the *Idea*, or absolute notion.

c. Absolute notion is the truth in itself and for itself, the absolute unity of notion and objectivity. It may be defined as reason, subject-object, the union of the real with the ideal, of the body with the soul, etc. *It is essentially a process.* In its immediate form it is *life*. When it becomes its own object in the theoretical order, it becomes *the true*; when it becomes its own object in the practical order, it becomes *the good*; and when, by its theoretical and practical activity (the knowledge of the true and the pursuit of the good), it returns to itself from the bias and finiteness of cognition and volition, it becomes the *absolute Idea*. Life is defective, inasmuch as it is the Idea implicit or natural; cognition-volition is defective in so far as it is the Idea as merely conscious, and therefore one-sided; the absolute Idea unites the truth of life with the truth of consciousness, supplying the defect of the former and overcoming the one-sidedness of the latter. This is *the goal of the entire series of logical processes*; in its next phase *the Idea passes over into otherness and becomes nature*.

Thus far we have followed the triadic developments of the Idea (reality, reason, the Absolute) through processes which in non-technical language may be styled the dialectic of the Divine Reason anteriorly to the creation of the universe. We come, in the next place, to the study of reason in nature.

2. **Philosophy of Nature.** *Nature is the Idea* (reason) *in the state of otherness*,—a state intermediate between the immediacy of reason as notion and the reintegrated immediacy of reason as it fully realizes itself in spirit. In nature the Idea has become externalized and particularized; its unity has disappeared, or rather is concealed. Still, nature, while it is a state of the Idea, is also a process of spirit, and although the natural sciences are right in regarding phenomena as isolated realities, they do not fully exhaust the truth of nature, the very plurality of phenomena being a contradiction which of itself shows that nature is a process. *Philosophy*, therefore, taking a higher view point than that of science, *represents nature as a series of successful struggles* by which the Idea, scattered as it were in plurality, regains unity and self-identity (self-consciousness) in the individual spirit (man), which is the goal of the processes of nature. Exclude this concept of the upward struggle of nature, and natural phenomena become a tangled mass of events in inextricable disorder.¹

There are three stages in the process which is nature, namely *mechanics* (matter and space), *physics* (bodies), and *organics* (life). In bodies, nature attains *individuality*; in living organisms, it attains *subjectivity*, or consciousness; it is only in man that it attains *self-consciousness* (self as subject and object). *Man*, however, while he is the highest product of the Idea in nature, is, like nature itself, *subject to the law of development*. No sooner, therefore, has the Idea become spirit by attaining self-consciousness in man, than it undergoes a further and final process of development as *subjective*, *objective*, and *absolute spirit*. This last process is the subject-matter of the philosophy of mind.

The philosophy of nature has been pronounced the least original and the least consistent of the three portions into which Hegel's philosophy is divided. It underwent more modification

¹ Cf. *Encyclopädie*, No. 249; *Werke* (edition 1847), Vol. VII, P. II, p. 32.

at the hands of Hegel's pupils and successors than did the logic or the philosophy of mind. Yet even in its modified form the Hegelian philosophy of nature is far from being consistent with the principles of absolute idealism. Indeed, the supreme test of a system of metaphysics is its compatibility with the ultimate truth of empirical science, — a test to which, it is safe to say, no system of idealism from the days of Parmenides to those of Hegel has consistently conformed. Not that the metaphysical point of view is not *different* from that of the physical sciences. There may, however, be difference without antagonism; for, as Hegel himself observes, "The philosophical way of presenting things is not a capricious effort, for once in a way to walk on one's head as a change from the ordinary method of walking on one's feet . . ., but it is because the manner of science *does not fully satisfy* that we are obliged to go beyond it."¹

3. **Philosophy of Mind.** *Mind* (spirit, *Geist*) is the truth of nature. Its formal essence is *freedom*, — the absolute self-identity of the Idea. Mind, it is important to note, is the most complete development of the Absolute, so that when we say "The Absolute is Mind," we have the supreme definition of the Absolute.² But although mind is absolutely the *prius* of nature, yet *for us* it comes out of nature, and therefore brings with it what may be called a germ of development. In this development we are to distinguish, as usual, three stages, — *subjective mind*, *objective mind*, and *absolute mind*.

A. *Subjective Mind.* If freedom is the formal essence of mind, consciousness is its material essence; for it is by successive steps towards complete self-consciousness that mind attains perfect freedom. Hegel agrees with Spinoza in teaching that

¹ *Encyklop.*, II. Theil, Einleitung; *Werke*, VII, 18. On the change of method implied in this admission, and on the possibility of transition from notion to nature, cf. McTaggart in *Mind*, N.S., Vol. VI (1897). For defense of Hegel's consistency on this point, cf. *Philosophical Review* (1896), V, 273.

² *Phil. of Mind*, p. 7. References are to Wallace's translation (Oxford, 1894).

the emancipative acts of the soul are conditioned by advance in knowledge, — a doctrine which does not surprise us when we remember that, in Hegel's view, thought is essentially dynamic, having, so to speak, a volitional as well as a cognitive phase. While mind was still immersed in nature, it took part in the planetary life of the universe, responding to the change of seasons, etc. Partially emerging from nature, it experienced in the first dull stirring of consciousness, namely *sensation* (*Empfindung*), a kind of vague realization of itself as in and for itself; *feeling* (*das Fühlen*) succeeded sensation, and was in turn succeeded by *self-feeling* (*Selbstgefühl*), which is the ground of *consciousness* (*Bewusstsein*). When it has reached this stage, mind, recognizing itself as an *ego*, has divested itself of nature. Next, as theoretical mind, it passes through the stages of *intuition* (*Anschauung*), *representation* (*Vorstellung*), and *thought* (*das Denken*). Having now *taken possession* (of its intuitions, representations, and thoughts), it proceeds, as practical mind, to determine its contents; this it does by means of *impulse* (*Trieb*), *desire* (*Begehren*), and *inclination* (*Neigung*), thus arriving at complete self-determination, which is freedom. Free will is, therefore, the union of theoretical and practical mind.

"It was," Hegel remarks, "through Christianity that this idea (of actual freedom) came into the world. According to Christianity, the individual, *as such*, has an infinite value as the object and aim of divine law." The Greeks and Romans, he explains, maintained that freedom is an accident of birth, or is grounded in strength of character, or is acquired by education and philosophy, while Christianity on the contrary maintains that man *as man* is free.¹

Freedom, once attained, *must be realized*, and, according to the universal formula of development, it must be realized through its opposite, necessity. It is for this reason that mind objectifies itself in *law*, the *family*, and the *state*. In this way, through

¹ *Op. cit.*, p. 101.

the discipline of necessity, the egotistic impulse becomes property *right*, sexual impulse becomes moral in *marriage*, and the inclination to revenge is transformed into punitive justice in the *state*.

B. Objective Mind. The yoke of necessity, to which free will subjects itself in order to realize full freedom, is (a) *right* (*Recht*), in which freedom attains outer actuality, (b) *morality* (*Moralität*), in which it attains inner actuality, and (c) *social morality* (*Sittlichkeit*), in which it attains complete actuality, which is both inner and outer.

a. From *right* springs ownership (*property*), and from ownership the right to dispose of one's possessions by *contract*. Now although contract refers primarily to individual property, it implies the merging of two wills in the common will. Hence arises the possibility of conflict between the will of the individual and that of the community. In this conflict consists *wrong* (*Unrecht*), which it is the duty of the public authority to correct by *punishment*. In this way the idea of contract leads to the idea of the *state*.

b. From *morality* spring *purpose* (the inner determination of the subject), *intention* (the subjective aim of the action to be performed, inasmuch as that aim is implied in the general well-being of the subject), and *good* and *evil* (the moral aspects of action). These determine the moral standpoint, the conscientious attitude, as we should call it, of the agent; however, they determine it so vaguely and unsatisfactorily that a conflict of apparent duties often results; for conscience is liable to error, and what is subjectively represented as good may be objectively evil. To right, therefore, and to morality must be added *social morality*. Right regulates merely the external, material interests of life; conscience is one-sided because it is subjective: *social morality, being at once objective and subjective, external and internal, is the complete realization of freedom through the discipline of necessity.*

c. *Social morality.* In social moral life the individual recognizes that what he *ought* to do *is*; for his duty is presented to him in its objective concrete realization in the family and in the state. He is no longer subject to the uncertainty of selective reflection: he sees his duty and he is, as it were, constrained to fulfill it. It is by submitting to this restraint that he attains the fullness of freedom.

The primary social moral institution is the *family*. It is the foundation of the state, and is, of its nature, permanent. Hegel was opposed to the principle of divorce, and would justify the granting of divorce only in exceptional cases provided for by law.

Civil society (die bürgerliche Gesellschaft) is the relative totality of individuals. It is different, on the one hand, from the family, for the family is an individual, and, on the other hand, from the state, for the state is a complete organic unity in which individuals, *as individuals*, do not exist. Civil society aims merely at the protection of individual interests; its mission is purely economic.

The State (Staat) is the perfect social organization. It does not live for the individuals of which it is composed, but for the ethical idea which it embodies, individuals being merely means which, when occasion demands it, must be sacrificed, as all private interests must be sacrificed, for the good of the whole.

Hegel, in treating of the state, takes up in succession *constitutional law* (the inner form of particular state organizations), *international law* (the outer form of states, which is regulative of the interrelations of states), and the *dialectics of history* (the laws of the general development of the universal mind, which manifests itself both in the internal constitution and in the outer forms of particular states).

a. *Constitutional law (inneres Staatsrecht).* The constitution is the articulation, or organization, of state power. From the point of view of the individual, the power of the state is a restriction. Still, inasmuch as it functions for the common

good, it is the substance of the volition of the individual. By nature men are unequal ; but before the law, that is, by virtue of the principle of state organization, — the merging of individual freedom in the objective mind, — all men are equal. This, however, means that as abstract persons they are equal ; for in the concrete there is no perfect equality, men being equal before the law only in so far as they are equal outside the law.

The collective spirit of the nation is the constitution ; the real living totality (the embodiment of the collective spirit) is the *government*, and although, according to the basic laws of organization, the government must divide its powers (legislative, judicial, and executive), it must, nevertheless, preserve the highest form of organic unity. For this reason a constitutional monarchy is superior to a republic on the one hand and to an absolute monarchy on the other hand. But while Hegel opposes the extension of *individualism within the state*, he is in favor of *the individualism of states* with respect to one another ; for the state is based on the national spirit, and the national spirit is fostered by unity of language, customs, religion, etc. So long as a nation stands for a national ideal it is a crime, Hegel teaches, to annex it.

β. *International law* (*das äussere Staatsrecht*), including treaty law and natural law, governs the relations of states to one another in time of peace and in time of war. *War*, Hegel teaches, is the indispensable means of political progress. It is *a crisis in the development of the Idea*, which is embodied in the different states, a crisis out of which the better state, that is the state which approaches more closely to the ideal, is certain to emerge victorious. For right is might ; the better state conquers because it is better. Thus in every period of the world's history there has been some one *chosen people*, a nation which realizes more perfectly than any other the ideal of national life. This consideration leads to the next point, the dialectics of history.

γ. *Dialectics of history.* Hegel's philosophy of history is, perhaps, the most important portion of his speculative system. In it we find the most intelligible application of the principle of development, which dominates the method and contents of the other portions of his philosophy. Indeed, Hegel as well as Schelling insisted that *the lower is to be understood by the higher*. The philosophy of history will, therefore, throw light on the philosophy of nature and on logic.

The most general definition of the philosophy of history is that it is *the thoughtful consideration of history*.¹ More specifically, the thought which philosophy brings to the study of history is the conception of a sovereign reason, of which the succession of historical events is a rational process. This is at once a postulate of history inasmuch as it is a demonstrated thesis of philosophy, and a conclusion of history inasmuch as it is a most obvious inference from the study of historical happenings. The "micrologist" admits the "peddling" of the idea of Providence, but denies its applicability to the process of history as a whole. We must not, Hegel observes, imagine God to be too weak to exercise His wisdom on the grand scale.²

History, then, is the process of reason as spirit. Interest, passion, character, in a word, all the forces at play in the process, are a compound of will and intelligence. The *world-historical persons*, the great men of history, apparently drew the impulse of their lives from themselves; in reality, however, they were great because they "had an insight into the requirements of the time,—*what was ripe for development.*" They embodied the irresistible force of spirit in their own lives: they lived not for themselves but for the Idea which was their master passion. Their fate, therefore, was not a happy one.

The development of the spirit in history aims at complete freedom; the process is, however, *not a tranquil growth, but a*

¹ *Philosophy of History*, Introduction, p. 9. References are to Sibree's translation (London, 1884).

² *Op. cit.*, p. 16.

stern, reluctant working through opposition to complete realization. Thus we have three stages,—oneness, expansion, and concentration. The *Oriental monarchies* represented despotism, the *Grecian republics* represented the unstable equilibrium of democracy tending towards demagogic rule, and the *Christian and parliamentary monarchy* represents the reintegration of freedom in constitutional government. Here we have an ideal example of *thesis, antithesis, and synthesis*,—the triadic movement which is the law of all development.

Even in the highest and most perfect form of political organization, mind is limited, and though the necessity which the state imposes makes for ultimate freedom, yet it is necessity. Mind, therefore, having objectified itself in the state, must complete the circle of development by returning to itself, becoming identical with itself and subjecting itself to itself alone, as Absolute Mind in *art, religion, and philosophy*.

C. Absolute Mind is the ultimate identification of mind with itself. Here mind subjects itself to itself, not as limited, but as infinite. There are three stages of Absolute Mind,—*art, religion, and philosophy*.

a. Art. In art, mind has an intuitive contemplation of itself as infinite in the objective actuality of the art material. According as the art material becomes more docile, less rebellious to the Idea, we have *architecture, sculpture, painting, music, and poetry*; this is at once the line of ascending perfection and the line of historical development.

b. Religion. In religion, mind *feels* that the Idea is superior to all its finite and particular manifestations. Religion arises from poetry, the highest form of art; but it is, by its nature, a protest against the tendency of art to become pantheistic. Religion insists on the infinity of God and the finiteness of man, whereas the tendency of art is to deify man and represent God as human. Nevertheless, it is essential to religion to *represent* the infinite and finite as in some relation with each other.

Oriental religions exaggerated the idea of the infinite ; Greek religion gave undue importance to the finite ; Christianity, being a synthesis of both, *represents* the union of the infinite and the finite in the doctrine of the Incarnation, and *represents all truth* in the dogma of the Trinity by teaching, as far as representation can teach, the triadic development of immanent reason as *idea, nature, and spirit*. The intellectual content of Christianity is thus the same as that of philosophy : there is no supernatural truth (*gnosticism*). Religion, however, contains the truth in the form of symbols and representations. Philosophy, therefore, which contains the truth as reason, is superior to religion.

c. Philosophy is the unity of art and religion. The infinite, which, as the beautiful, was rendered visible in art, and, as God, was made the object of representation and feeling in religion, is now, as the true, made the object of the thinking faculty in philosophy. Philosophy is, consequently, "the highest, freest, and wisest phase of the union of subjective and objective mind, and the ultimate goal of all development."

Historical Position. It is difficult to trace even in outline the influence which Hegel's philosophy exercised on the thought of his own and subsequent generations. Some of Hegel's contemporaries regarded his system of philosophy as the organic synthesis of all preceding speculation and the final form of philosophic thought. Others believed, and not a few still believe, that that system must be the foundation of all profitable speculation in the future. And when due allowance is made for the exaggerations which are inevitable whenever the cult of greatness attains, as in this instance it has attained, almost to the proportions of religious veneration, it cannot be denied that Hegel's was the mind which, in developing towards a more complete unity the elements of Kantian thought, took the most comprehensive synthetic view of the problems of philosophy, reached farthest and deepest into every department of knowledge, and found in the principle of development the bond best

•

suitied by reason of its simplicity and universal applicability to hold together the various elements of a system extending from the problems of logic to the analysis of religion. It is safe to say that no department of human knowledge has failed to feel the influence of Hegel's doctrines, or at least of his method. And this is due partly to the fact that his philosophy embodies the highest aspirations of the spirit of the nineteenth century, — the spirit of *collectivism*, — and partly to the fact that in his system of thought so large scope is assigned to the principle of development, which has so dominated the scientific as well as the philosophical thought of the century.

But the very greatness of Hegel's plan, the vastness of the enterprise itself, was the surest guarantee of its ultimate failure. "The rational alone is real" is a formula which, as understood and applied by Hegel, means that there are no limits to the power of the thinking faculty. For whether we understand the "rational" to refer to the Infinite Reason of the Creator or to the finite reason of the creature, the conclusion is ultimately the same, — that everything real is to be analyzed in terms of rational thought. How inadequate is this view of reality the reaction against Hegelianism has taught us by insisting on the importance of the non-rational, and how hopeless is the self-imposed task of this new *gnosticism* is proved by Hegel's concept of God, which is the least satisfactory portion of his philosophy. The attempt to bring all reality under a single formula may indeed be the ideal of philosophy, but it is certainly an ideal which is as unattainable in practice as is the dream of the world conqueror who would bring all the nations of the earth under the scepter of one monarch. The highest unification which the finite mind can effect will necessarily fall short of absolute unity; for it is not given to the human mind to grasp the totality of being and to find in one formula a *rationale* of all reality. No philosophical system can consistently claim to comprehend God; it may discover Him, but it must acknowledge that He and His ways are

•

inscrutable. *Philosophy must leave room for faith, and its last word must be the necessity of faith.* Gnosticism, as the modern world is just now realizing, is more irreligious than agnosticism.

It was the *followers of Hegel* who first revealed to the religious world the true drift of Hegelianism. The so-called Hegelian *Leftists* developed the anti-Christian elements in Hegel's thought, while the *Rightists* maintained that the teaching of Hegel accords with Christian faith and the doctrines of the Church. To the Leftists belonged **Strauss** (1808–1874), author of *Das Leben Jesu*, **Bruno Bauer** (1809–1882), author of *Kritik der evangelischen Geschichte des Johannes* (not to be confused with F. C. Baur [1792–1860], head of the Tübingen School), **Feuerbach** (1804–1872), author of *Das Wesen des Christenthums*, and the socialist **Karl Marx** (1818–1883). To the Rightists belonged **Göschel** (1781–1861), **Rosenkranz** (1805–1879), professor at Königsberg, and **Johann Eduard Erdmann** (1805–1892), professor at Halle.

CHAPTER LXVI

GERMAN PHILOSOPHY (*Continued*)

In the movement which arose in opposition to Hegel's philosophy we may distinguish three currents: (1) the *Psychological* movement, represented by **Fries** and **Beneke**; (2) the *Realistic* movement, represented by **Herbart**; (3) the *Voluntarist* movement, represented by **Schopenhauer**.

1. **Psychological Reaction against Hegelianism.** **Fries** (1773–1843), professor at Jena and at Heidelberg, and author of the *New Critique of Reason* (1807), adopted Kant's results, but rejected the method of transcendental criticism, substituting for it empirico-psychological inquiry, which he made the basis of all philosophy.¹ He also admitted into his system of thought

¹ Cf. Falckenberg, *op. cit.*, p. 409 (English trans., p. 507).

elements derived from the fideism of Jacobi. His work was continued and developed by **Beneke** (1798–1854), who succeeded to Hegel's chair in the University of Berlin (1832), and by **Ueberweg** (1826–1871), and **Fortlage** (1806–1881), who taught at Königsberg and at Jena respectively.

2. **Realistic Metaphysics.** **Herbart** (1776–1841), after studying at the University of Jena, spent several years as private tutor in Switzerland, where he made the acquaintance of **Pestalozzi** (1746–1827), the founder of modern pedagogy. From 1802 to 1809 Herbart taught at Göttingen; in 1809 he was transferred to Königsberg, whence he was recalled to Göttingen in 1833. His collected works were published in twelve volumes (Leipzig, 1850–1852) by his pupil Hartenstein.¹

Herbart took up the realistic elements of Kant's philosophy and combined them with Leibnizian monadism; the metaphysical system which he evolved from these premises he himself described as realism. He defines philosophy as *the elaboration of the concepts which underlie the different sciences*, thus outlining the task which he undertook; namely, (a) to restore realism, (b) to rehabilitate the principle of contradiction, and (c) to establish philosophy on a scientific basis.

In his *metaphysics* he teaches that Being is not one, as the Eleatics and the pantheists held, but many. The multiple *realities* (*Realen*), which constitute real being, correspond in a measure to the monads of Leibniz's philosophy; they differ, however, in this, that they are devoid not only of all perception and incipient consciousness, but of all activity whatsoever, except the power of self-preservation. Extension in space, action in time, inherence, causality involve contradictions, which philosophy removes by the elaboration of these concepts.

In his *psychology* Herbart conceives the soul as a simple real essence, one of the *Realen*, and the ideas of the soul he

¹ New ed. by Kehrbach, 1882 ff. Cf. Ribot, *Contemporary German Psychology* (trans. by Baldwin, New York, 1886); also article on Herbart in *Encyc. Brit.*

conceives to be acts of self-preservation. There are not, therefore, several faculties of the soul, but one faculty, the function of which is to preserve the soul in its indestructible originality. Perception arises from the conflict of this self-preserving tendency with the self-preserving tendency of other real beings. Mental states are thus *an equilibrium of opposing forces*, and Herbart, by attempting to reduce psychic life to a mechanism, the laws of which are the same as those of physics, forestalled the attempts of Fechner and Wundt to make psychology an exact science. The best known example of this mechanics of the mind is the attempt to determine the *sum of arrest* of ideas.

Consistently with his rejection of the plurality of mental faculties, Herbart identifies will with thought, and teaches that the freedom of the will is merely the assured supremacy of the strongest idea or mass of ideas.

Historical Position. Herbart is distinguished by his "systematic opposition to the method, starting point, and conclusions of Hegel." His philosophy is a union of Eleatic, Leibnizian, and Kantian elements. We must not overlook the fact that Herbart devoted special attention to the pedagogical aspects of philosophy, his rejection of the plural concept of mind being of special importance on account of its influence on the development of the theory of education.

3. **Voluntarism.** The most important of the anti-Hegelian movements was that inaugurated by Schopenhauer, a movement which may be described as an emphatic assertion of the importance of the non-rational in a philosophical synthesis.

SCHOPENHAUER

Life. Arthur Schopenhauer was born at Danzig in 1788. After traveling in France and England, he entered the University of Göttingen and devoted himself to the study of the natural sciences and of Plato. From Göttingen he went to Berlin, where Fichte was lecturing at the time; thence he went to Jena, and there obtained his doctor's degree, for which he wrote

the dissertation entitled *The Fourfold Root of the Principle of Sufficient Reason* (*Über die vierfache Wurzel des Satzes vom zureichenden Grunde*, 1813). During the four following years, which he spent at Dresden, he devoted much attention to the study of Hindu philosophy. His principal work, *Die Welt als Wille und Vorstellung*, appeared in 1819. After two unsuccessful attempts to expound his philosophy from the professor's chair and to stem the tide of Hegel's popularity at Berlin, he retired in 1831 to Frankfort-am-Main, where he spent the remainder of his life in learned retirement, indulging his moody and passionate temperament and elaborating a system of pessimism in which one may see, in addition to the influence of his Buddhist studies, the reflection of the personal character of the man. He died in 1860.

Sources. Schopenhauer's *Complete Works* have been edited several times (for example, Leipzig, 1873-1874; second edition, 1877; Leipzig, 1890; and finally, Leipzig, 1894). The following works exist in English translations: *Fourfold Root, etc.* (London, 1891), *The World as Will, etc.* (3 vols., London and Boston, 1884-1886), *Essays* (5 vols., London and New York, 1896). The best English presentations of Schopenhauer's philosophy are to be found in Wallace's *Schopenhauer* (London, 1890), and Caldwell's *Schopenhauer's System in its Philosophical Significance* (New York, 1896).¹

DOCTRINES

General Character of Schopenhauer's Philosophy. Kant, Plato, and the Buddhist philosophers contributed to the building of Schopenhauer's system of thought. From Kant and the Kantians was derived the transcendental element, — the criticism with which Schopenhauer started, and the synthetic arrangement by which he grouped all the elements of thought under the absolute will. From Plato was derived the theory of Ideas as stages of the voluntary phenomenon; and from the Buddhists, the pessimism and the negation of will, which form the practical aspects of Schopenhauer's system. Mention must also be made of Hegel's influence, which, however, was wholly indirect. Indeed,

¹ Consult Sully, *Pessimism* (second edition, London, 1891); Zimmern, *Schopenhauer, His Life and Philosophy* (London, 1876); K. Fischer, *Arthur Schopenhauer* (Heidelberg, 1893); Volkelt, *A. Schopenhauer* (Stuttgart, 1900).

it is hardly an exaggeration to say that Schopenhauer was a voluntarist because Hegel was an intellectualist, the former insisting on *the importance of the non-rational* because the latter identified the rational with the real.

Starting Point. Schopenhauer, like Fichte and Schelling, starts with the Kantian resolution of noumenal reality into subject and object (thing-in-itself), and addresses himself, as they addressed themselves, to the task of analyzing the object with a view to *perfecting the Kantian synthesis*. Influenced to a greater extent than he was aware of by Fichte's subjectivism, he maintained that there is *no object without subject*. Instead, however, of resolving the subjective aspect of the object into a rational activity of the Ego, he resolved it into the volitional activity of the *will*, which is not only the essence of man but also the essence of the universe.

The Fourfold Root. In the treatise entitled *The Fourfold Root of the Principle of Sufficient Reason*, Schopenhauer teaches that the celebrated principle which had played so important a part in Leibniz' philosophy has four forms, corresponding to the four classes of representations to which it is applied; namely: (1) *principium rationis essendi*, as applied to formal intuitions; (2) *principium rationis fiendi*, as applied to empirical intuitions; (3) *principium rationis agendi*, as applied to acts of the will; and (4) *principium rationis cognoscendi*, as applied to abstract concepts.

The World as Representation. In his most important work, *The World as Will and Representation*, Schopenhauer first takes up and evolves the epistemological principles which he had expounded in his earlier treatise. Here he lays special emphasis on the notion of causality. When we analyze our experience, he says, we find that all that is *given* is sensation or representation. The understanding, however, which may not be separated from sensation, immediately refers the representation to an external cause. Now if we were *merely rational* beings, endowed with

sense and intellect, but devoid of volition, we should never be able to answer the question, What is the external cause of representation? It is by combining internal experience with external that we perceive *will* to be the ultimate real, the noumenal cause of the phenomenon. Will, therefore, determines our knowledge of reality and constitutes reality itself. Will governs knowledge.

It is important to note that by *will* Schopenhauer understands not merely the faculty of choice but also impulse, the blind unreasoning impulse to self-preservation, which manifests itself in pleasure and pain, hope and fear, love and hatred, — in a word, the *will-to-live*. To this blind impulse he subordinates knowledge, and although he claims that voluntarism is opposed to materialism on the one hand, and to subjective idealism on the other, the whole trend of his investigation of knowledge is towards the materialistic conclusion that understanding is a function of the brain. In this connection he quotes with apparent approval the celebrated saying attributed to Cabanis: "As the liver secretes bile, the brain secretes ideas."¹

The will is absolute. All representation is conditioned by causality, space, time, etc., which constitute the principle of *individuation*. The will is subject to none of these conditions; it is neither individual nor personal, although individual acts of the will (volitions), being merely representations, are subject to causality, space, time, and other individuating conditions.

The World as Will. In the second book of the treatise above mentioned (*The World as Will, etc.*), Schopenhauer proceeds to the study of the external world, which is the will in the form of objectivity, that is, in the body which it creates for itself. Starting with *self*, he takes for granted as axiomatic that the human body is merely the external manifestation of the inner force which is human will. *The will may be said to create the body*: in truth, however, the inner volition and the outer bodily action

¹ Cf. Höffding, *op. cit.*, II, 225.

are not cause and effect, but are merely the inner and the outer aspect of the same reality.

Turning next to the world of natural phenomena he finds there the *all-permeating, all-producing will as natural force*. This force manifests itself in purely mechanical action and reaction, in chemical affinity, in the striving and unconscious appetite of vegetable life, and in the conscious self-preserving impulse of animals. Everywhere and at every moment will is indefatigably active, organizing, preserving, sustaining. It is will that endows the animal with weapons of defense and with the means of obtaining its food; it is will too that endows the animal with consciousness and man with intellect, for these are weapons like any other contrivance for escaping from the enemy or securing prey. Indeed, *intellect is the most perfect of all the weapons with which will has endowed creatures*, for as the ink sac of the cuttlefish serves to conceal the animal's flight or approach, so intellect serves to hide the intent of the will and thus to insure its success.

The will-to-live, as manifested in vegetable, animal, and human life, is essentially a combative impulse; as one form of existence necessarily comes in the way of other forms there arises an inevitable struggle. Here Schopenhauer undoubtedly forestalls the Darwinian concept of nature as a *struggle for existence*. Yet, although he insists on the influence of want and environment on organic development, he is opposed to the Lamarckian hypothesis of the evolution of the higher from the lower species.

Pessimism. Schopenhauer was by temperament and disposition inclined to dwell on the gloomy side of the picture of life which he presented in his doctrine of the struggle of nature. The only positive feelings, he taught, are those of pain: pleasure is the merely temporary satisfaction of a need, and is, therefore, negative. *Positive pleasure is an illusion*. "The simple truth is that we ought to be miserable, and we are so. The chief source of the serious evils which affect man is man himself;

homo homini lupus. Whoever keeps this fact clearly in view beholds the world as a hell which surpasses that of Dante in this respect, that one man must be the devil of another. . . . Life is a path of red-hot coals with a few cool places here and there."¹

The Escape from Bondage. In the third and fourth books of the treatise, *The World as Will, etc.*, Schopenhauer undertakes to answer the question, How is man to escape from the bondage of will and the misery of life? In his answer he maintains throughout the individualistic standpoint: he has no belief in deliverance through the ultimate development of the race; each man must deliver himself. Now the means of deliverance are three: *art*, *sympathy*, and *negation of the will-to-live*.²

Art. When a man loses himself in artistic contemplation, pure perception takes full possession of his conscious life; the will disappears and with it all suffering. In this connection Schopenhauer attaches especial importance to *music* as a means of deliverance from the bondage of suffering. But, he confesses, it requires a very great effort to maintain the artistic attitude. We must look, therefore, beyond art to find a more effectual remedy.

Sympathy differs from art in this, that it is permanent and may be universal. Misery, as we have seen, arises from the egoistic impulse to preserve one's own existence at the expense of the well-being of others. Now sympathy leads us to look upon the sufferings of others as our sufferings; it implies the oneness of all nature, the disappearance of the concept of individuality, which is an illusion, and the *substitution of the will-to-let-live for the will-to-live*. It is, therefore, the ground phenomenon of ethics. Yet even sympathy can only alleviate suffering; in order wholly to destroy and remove the source of pain, man must negate the will-to-live, which is the origin of suffering.

Negation of the Will-to-live. Schopenhauer finds both in Christian asceticism and in Buddhism examples of men in whom

¹ *Werke*, VI, 663.

² Cf. Caldwell, *Schopenhauer's System, etc.*, pp. 171 ff.

the *will-to-live is completely eradicated*, men who are utterly indifferent to self-preservation and the preservation of the race. This is the ideal of quiescence which the philosopher should strive to attain, the *nirvana* in which passion and desire and conflict and suffering disappear, to give place to perfect peace.

Historical Position. Schopenhauer's philosophy is lacking in systematic cohesiveness. His theory of knowledge, his *pantheism* (identity of will with reality), his pessimism, and his doctrine of deliverance from suffering are not articulated into a rational system. Perhaps the failure to furnish a complete and consistent rational scheme was pardonable in one who insisted so emphatically on the irrational nature of reality. Indeed, it is almost impossible in this instance to separate the philosophy from the philosopher, so deeply do the doctrines of Schopenhauer bear the impress of the character of the man. His doctrines are, however, of extrinsic importance as reflecting the sentiments of an age grown weary of life and surfeited with rationalism and idealism. For pessimism is an index of inferior vitality rather than of superior spiritual insight, and the insistence on the non-rational nature of reality is a symptom of a malady which may be traced to an overdose of transcendental metaphysics.

Eduard von Hartmann, born at Berlin in 1842, is the most original of Schopenhauer's disciples, and is regarded as the greatest living exponent of modified voluntarism and mitigated pessimism. His system, which was first expounded in the *Philosophie des Unbewussten* (1869),¹ and since then has been developed and defended in several important treatises, may be described as a philosophy of the *unconscious*. Hartmann, inspired with the idea of reconciling Schopenhauer with Hegel, tries to unite the pantheism of the former with the evolutionary idealism of the latter. The ground of reality, the absolute, is, he teaches, the unconscious, which is not an irrational will, but a will acting as if it were intelligent. The will, guided by ideas, acts with a

¹ Translated by E. C. Coupland (London, 1886).

knowledge of its actions; but since it does not know that it knows, it is unconscious. Hartmann *modifies Schopenhauer's pessimism* by teaching not only that the individual is freed from the misery of life by attaining the negation of the will-to-live, but that the whole universe is moving by an evolutionary process towards a universal redemption from evil by means of a universal denial of will.

Wilhelm Richard Wagner (1813-1883) and Friedrich Nietzsche (1844-1900) are cited among those who were influenced in their artistic and literary labors by Schopenhauer's doctrines.¹

CHAPTER LXVII

THE SCOTTISH SCHOOL

While German philosophers, inspired by the idea of counteracting the scepticism of Hume, were evolving systems of transcendental philosophy from the principles laid down by Kant, there was developing in Hume's own country a school of philosophy which, although it made common cause with transcendentalism against scepticism, reached conclusions very different from those of the transcendentalists. Indeed, in the first stages of its development, the Scottish school was as much opposed to transcendentalism as it was to scepticism; for the doctrine of common sense is not merely an affirmation of dogmatism, but also a protest against absolute idealism.

McCosh, whose work on *The Scottish Philosophy*² is an authority, regards Reid as the first "fit representative of the Scottish school, although Sir William Hamilton traces the history of the school back to Carmichael and Reid."

¹ Cf. Windelband, *op. cit.*, pp. 633 and 634.

² *The Scottish Philosophy* (London, 1902). The best work on the Scottish School is Laurie's *Scottish Philosophy* (London and Glasgow, 1902).

REID

Life. Thomas Reid (1710–1796), who succeeded Adam Smith as professor of philosophy at the University of Glasgow, is the author of *An Inquiry into the Human Mind on the Principles of Common Sense* (1764), *Essays on the Intellectual Powers of Man* (1785), and *Essays on the Active Powers of Man* (1788). The edition of Reid's works begun by Hamilton (1827) was completed after the latter's death. The seventh edition appeared in 1872.

DOCTRINES

There are in Reid's philosophy two points of doctrine which deserve special attention: his theory of perception and his doctrine of common sense.

Theory of Perception. Reid rightly traced the immaterialism of Berkeley and the scepticism of Hume to the Cartesian doctrine that what we directly and immediately perceive is not the external object, but a subjective modification which is an image of the object, — a doctrine which he falsely attributes to the schoolmen.¹ In opposition to this representative theory of perception, Reid maintains the presentative theory, — that *our knowledge of external things is immediate*. Startled, however, by his own boldness, as Hamilton observes, he proceeds to deliver the whole case into the hands of his opponents by declaring that the perception of external objects is to be exempted from the region of consciousness, so that while he holds that we have an immediate perception of external objects, he does not admit that we are conscious of such perception.²

Doctrine of Common Sense. "Philosophy," Reid teaches, "has no other root but the principles of common sense; it grows out of them and draws its nourishment from them. Severed from this root, its honours wither, its sap is dried up, it dies and rots."³ Zeno the Eleatic, Pyrrho the sceptic, Berkeley the immaterialist, and Hume the phenomenalist overlooked this

¹ *Works* (ed. 1863), p. 952.

² Cf. Hamilton, *Metaphysics*, Lect. XIII.

³ *Works*, p. 101.

truth. Hobbes and Descartes, who were equally neglectful of the claims of common sense, are accountable for "the present unprosperous state" of philosophy.

The principle on which Reid's philosophy is grounded is the following: "*All knowledge and all science must be built upon principles that are self-evident*; and of such principles every man who has common sense is a competent judge."¹ Self-evident truths, such as the axiom of causality, are to be exempted from critical inquiry; they are primary data of intellectual thought.

In developing this fundamental principle Reid takes advantage of the twofold meaning of the term *common sense*, namely: (1) the combination of qualities constituting good sense, or the faculty of sound judgment; (2) the aggregate of original principles planted in the minds of all men. Hamilton has shown that if we take the latter meaning of the term, Reid's argument is a valid and legitimate refutation of scepticism.²

Historical Position. Not even the most enthusiastic of Reid's admirers claim for him the title of great philosopher. "He has not," writes McCosh, "the mathematical consecutiveness of Descartes, the speculative genius of Leibnitz, the sagacity of Locke, the spirituelle of Berkeley, or the detective skill of Hume."³ Reid himself was of opinion that "it is genius and not the want of it that adulterates philosophy." The greatest benefit that Reid conferred on philosophy was the importance which he attached, and succeeded in causing others to attach, to introspection, or self-observation.

James Oswald (1727-1793) and James Beattie (1735-1803) popularized and applied to theological controversy the principles of the philosophy of common sense. Mention must also be made of a contemporary of Reid, the eccentric author of *Ancient*

¹ *Op. cit.*, p. 422.

² Cf. Note A to Hamilton's edition of Reid's *Works*, pp. 742 ff.

³ *Realistic Philosophy*, II, 175.

Metaphysics, or the Science of Universals (Edinburgh, 1779-1799), namely, James Burnett, Lord Monboddo (1714-1799).

The philosophy of the Scottish school was developed by Stewart, Brown, and Mackintosh before reaching its final phase as represented in the philosophy of Hamilton.

DUGALD STEWART

Life. Dugald Stewart (1753-1828) was the most eminent of the followers of Reid. His principal work is entitled *Elements of the Philosophy of the Human Mind*. His *Collected Works* were published in ten volumes by Hamilton (Edinburgh, 1854-1858).

DOCTRINES

Stewart accepts Reid's analysis of perception. While vindicating Reid's empirical method of self-observation, he attached greater importance than Reid had done to the *association of ideas*. He protested, however, with the utmost vigor against the materialism of the first associationists, Hartley, Priestley, and Erasmus Darwin.¹

THOMAS BROWN

Life. Thomas Brown (1778-1820), after studying law and medicine at the University of Edinburgh, was appointed in 1810 associate professor with Dugald Stewart. His chief works are *An Inquiry into the Relation of Cause and Effect* (1804) and *Lectures on the Philosophy of the Human Mind* (1820).

DOCTRINES

Brown retains the fundamental doctrine of the Scottish school, namely, the existence of indemonstrable first principles. He is, however, more inclined than were his predecessors to restrict the number of these principles and to *give larger scope to association* in accounting for the origin of our universal and

¹ Cf. *Philosophical Essays*, pp. 166 ff. (first American edition, Philadelphia, 1811).

necessary beliefs. In his analysis of the processes of sensation he attaches great importance to the *muscular sense*. With regard to causation, he teaches that, while the relation of cause and effect is merely one of invariable succession, our judgment concerning that relation is not the result of association or custom, but a primitive, or intuitive, belief.

MACKINTOSH

Life. Sir James Mackintosh (1765–1832) was no less distinguished as a statesman, historian, essayist, and critic than as a philosopher. His principal philosophical works are a *Dissertation on the Progress of Ethical Philosophy* (contributed in 1830 to the *Encyclopædia Britannica*), and a *Discourse on the Law of Nature and Nations* (1799).

DOCTRINES

Mackintosh, while adhering to the original speculative principle of the Scottish school, even going so far as to accuse Brown of openly revolting against the authority of Reid, departed from the ethical tradition of the followers of Hutcheson to the extent of admitting that *benevolence* is the universal characteristic of human virtue. But although he betrays here the influence of the utilitarians, he does not maintain that the happiness of others is the universal criterion of moral conduct. He is inclined rather to side with the intuitionists and to insist on the *supremacy of the immediate judgment of conscience*.

The next representative of the Scottish school is **Sir William Hamilton**, who, under the influence of Kantian principles, developed the philosophy of his predecessors, Reid and Stewart, into a more comprehensive system. It was, however, inevitable that the introduction of foreign elements of speculative criticism should react on the dogmatism of the founders of the school, and lead to a partial scepticism, which, in the nineteenth century, proved a no less formidable foe to theism in religion and

to absolutism in philosophy than was Hume's scepticism in the eighteenth.

SIR WILLIAM HAMILTON

Life. Sir William Hamilton was born at Glasgow in 1788. After completing his studies in the department of arts in the university of his native city, he took up the study of medicine at Edinburgh. In 1807 he went to Oxford. After leaving Oxford he began the study of law, and in 1813 was admitted to the Scottish bar. In 1821 he was appointed to the chair of civil history in the University of Edinburgh. In 1836 he was appointed to the chair of logic and metaphysics, which he held until his death in 1856.

Sources. Besides the *Discussions on Philosophy, Literature, and Education* (1852), the *Lectures on Metaphysics* (second edition, 1866), the *Lectures on Logic* (second edition, 1866), and many important articles in the *Edinburgh Review* (from 1829 to 1839), Hamilton contributed to English philosophical literature his valuable editions of Reid's and Stewart's works. Consult: J. S. Mill's *Examination of Sir William Hamilton's Philosophy* (London, 1865; fifth edition, 1878); Wight's *Philosophy of Sir William Hamilton* (New York, 1854); Bowen's *Metaphysics of Sir W. Hamilton* (Cambridge, Mass., 1867); and Veitch's *Hamilton* (*Blackwood's Philosophical Classics*, Edinburgh and Philadelphia, 1882).

DOCTRINES

General View of Philosophy. Hamilton defines philosophy as the knowledge of effects in their causes, — a definition which, as Hamilton himself observes, implies that all the sciences are to be viewed as so many branches of philosophy.¹ Philosophy, however, differs from the other sciences in having for its primary problem to investigate and determine the conditions of knowledge. Consequently, it makes *mind* its first and paramount object of consideration.² In *logic, ethics, politics, the philosophy of the fine arts, and natural theology* the mind is studied "in certain special applications," while in *metaphysics* the mind is studied in itself. Now *metaphysics*, or psychology (for the terms are synonymous), has a threefold task: (1) the

¹ *Metaphysics*, Lect. III.

² *Ibid.*

observation of facts and phenomena of the mind (*phenomenology of mind*); (2) the study of the laws which regulate these facts (*nomology of the mind*); and (3) the study of the "real results" which we are warranted in inferring from these phenomena (*ontology*, or metaphysics, properly so called).

Logic. Hamilton's most important contribution to logic is his *Theory of the Quantification of the Predicate*. This theory is based on the postulate that "we be allowed to state explicitly in language all that is implicitly contained in thought," and on the alleged fact that in thought we quantify the predicate as well as the subject of a judgment. The innovation would necessitate a complete change in the system of logical notation, and was destined (so, at least, its author claimed) to reform the entire science, to reduce propositions to equations, to simplify the doctrine of conversion, and to abolish the figured syllogism.¹

Psychology. Hamilton divides the phenomena of the mind into *cognitions*, *feelings*, and *conative phenomena* (volitions and desires). The cognitive states are subdivided according as they are referred to one or other of the cognitive faculties; namely, the *presentative*, the *conservative*, the *reproductive*, the *representative*, the *claborative*, and the *regulative*.

The *presentative faculty* includes external and internal perception, the former being synonymous with consciousness of states of the not-self, and the latter with self-consciousness, or consciousness of states of self. For, whether it is question of external or of internal perception, all that we perceive is the phenomenon; so that our knowledge of matter, as well as our knowledge of mind, is confined to phenomenal states. "Our whole knowledge of mind and matter," Hamilton writes, "is thus only *relative*; of existence, absolutely and in itself, we know nothing."² In this sense Hamilton is a *relativist*, — a relativist, however, of a class altogether different from that to which

¹ Cf. *Lectures on Logic*, Appendix IV. For criticism of this theory, cf. Mill's *Examination*, II, 195 ff.

² *Metaph.*, Lect. VIII.

are assigned those who, like Protagoras, held that man is the measure of all things.

The qualities of external reality as perceived by us are reduced to three classes, — *primary*, *secundo-primary*, and *secondary*, — according as the knowledge element or the feeling element predominates in the perception.¹ Of these qualities we have an immediate, or presentative, not a mediate, or representative, knowledge. Hamilton is, therefore, an advocate of *natural realism*, of which he says Reid is the first champion in modern times.²

The *conservative* and *reproductive faculties* include the retentive and resuscitative functions of memory. The resuscitative faculty is governed by the *laws of association*, to which Hamilton devoted special attention.³

The *representative faculty*, or *imagination*, is defined as the power of representing in consciousness and of keeping before the mind the knowledge presented, retained, and reproduced.⁴

The *elaborative* faculty is the faculty of comparison. It includes generalization (simple apprehension), judgment, and reasoning.

The *regulative* faculty is what the ancients called *intellect*, and what Reid and Stewart designated as *common sense*. The phenomena with which it is concerned are not data of experience, but rather the *native cognitions of the mind*, which are the conditions of all experience.

Passing over the nomology of the mind, we next come to the questions of ontology, that is to the inferences drawn from the study of the mind.

Ontology. Since we know only the relations of things, since relativity in this sense is a quality of all human knowledge, it

¹ Cf. *Reid's Works*, Note D, p. 858.

⁴ *Op. cit.*, Lect. XX.

² *Metaph.*, Lect. XXIV.

³ *Reid's Works*, Notes D** and D***; also *Metaph.*, Lects. XXXI and XXXII.

follows that we cannot know the unconditioned. "Conditional limitation is the fundamental law of the possibility of thought. . . . To know is to condition."¹ *The unconditioned*, however, is not in itself a contradiction; its inconceivableness does not preclude the possibility of its existence. It is inconceivable as a concept, and its existence is unknowable so far as reason, intuition, and experience go. Hamilton, however, admitting that "our faculties are weak, not deceitful,"² holds that a supernatural revelation of the Absolute supplements our ordinary knowledge of it.

With regard to *self* and *not-self*, Hamilton, while holding that the doctrine of relativity applies to these objects of knowledge, — that self and not-self are *per se* unknowable as to their substance, — concedes that our mental experience reveals self as a unity amid successive changes, and that our experience of the external world warrants us in representing it as a reality which is permanent as to the quantum of existence, although the forms of existence are constantly changing.³

It is scarcely necessary to point out here the *ambiguity of the term "relativity"* as applied to human knowledge. Between the propositions "We know only the relations of things" and "We know the related thing only in so far as it is related to us" there is a vast difference, — a difference to which the difference between agnosticism and theism is ultimately reduced.

Hamilton explains the universal belief in *causation* by the inability of the human mind to think anything except under the conditions of space and time.

Historical Position. Hamilton brought to bear on the study of philosophy an erudition less common than it ought to have been among British philosophers in the early part of the nineteenth century. It was by encouraging historical research in connection with the study of philosophy, and by fostering a spirit

¹ Cf. *Logic*, Lect. V.

² *Discussions*, p. 15.

³ Cf. Veitch, *Hamilton*, pp. 261 ff.

of scholarship rather than by stimulating constructive effort, that his influence as a writer and teacher was most widely felt. Exception must, however, be made in favor of his doctrine of relativity, which may be said to be the philosophical basis of modern agnosticism, although it is quite certain that Hamilton never intended that his criticism of rational knowledge should become a criticism of belief.

Henry Longueville Mansel (1820-1871) was the first to apply the doctrine of relativity to the defense of religion. In the *Limits of Religious Thought* (Bampton Lecture, 1858) and the *Philosophy of the Conditioned* (1866) he endeavors to refute rationalism by showing, in conformity with Hamilton's principles, that the only knowledge of the unconditioned which the human mind can acquire is "negative," and that in matters of religious belief a scientific system is impossible. He insists that the difficulty of believing arises not from revelation but from *the inability of reason to form a positive concept of God*,¹ and concludes that reason must be corrected and supplemented by faith. The constructive aspect of Mansel's system was, however, neglected; its destructive aspect was promptly seized upon and converted into a justification of *agnosticism*.

James Frederick Ferrier (1808-1864), author of the *Institutes of Metaphysic* (1854), is sometimes reckoned among the members of the Scottish school. His attitude was, however, one of antagonism to the doctrines of that school, and especially to the identification of metaphysics with psychology, which was, as we have seen, a tenet common to all the Scottish philosophers. He divided philosophy into *epistemology* (the theory of knowing), *agnoiology* (the theory of ignorance), and *ontology* (the theory of being).²

¹ "Of the nature and attributes of God in His Infinite Being, Philosophy can tell us nothing; of man's inability to apprehend that nature, and why he is thus unable, she tells us all that we can know and all that we need know" (*Limits of Religious Thought*, p. 185).

² Cf. Ueberweg, *History of Philosophy*, English trans., II, 421.

CHAPTER LXVIII

FRENCH PHILOSOPHY

At the end of the eighteenth century the sensism of Condillac was the dominant philosophy in France. During the Revolution this sensism was represented by the materialist **Cabanis**, of whom mention has already been made. During the last years of the eighteenth century and the first years of the nineteenth **Destutt de Tracy** (1754-1836) taught a system of ideological sensism in opposition to the physiological sensism of Cabanis.

The period of reconstruction, with which the nineteenth century opened in France, witnessed *two important movements opposed to sensism*, the one theological and the other psychological. Towards the middle of the century, positivism appeared, and, as a result of the practical bent of positivism, there appeared also an important school of economy and sociology. Accordingly, the history of French philosophy in the nineteenth century includes the study of (1) *the theological or traditionalist school*, (2) *the psychologico-spiritualistic school*, (3) *positivism*, and (4) *the sociological school*.

1. **The Traditionalist School.**¹ The Catholic reaction against the materialism and rationalism of the period of enlightenment, so called, appears in the writings of **Joseph de Maistre** (1754-1821), who in his work, *Du Pape* (1819-1820), defends the principle of papal authority, and in his *Soirées de Saint Petersbourg* (1821) arraigns the philosophy of the eighteenth century as a conspiracy against the truth. In the latter work De Maistre touches on the relation of Divine Providence to human affairs, and speaks of a future religious renovation which he describes in somewhat mystical language as the submerging of all things and all men in the ocean of divinity.²

¹ Cf. Blanc, *Histoire de la philosophie* (3 vols., Lyons, 1896-1897), II, 443 ff.

² Cf. *Soirées* (septième édition), II, 203.

DE BONALD

Life. Louis Gabriel de Bonald, who is perhaps the most important of the *traditionalists* of this period, was born at Mouna near Millau, in 1754. Having thrown in his lot with the royalists, he was obliged in 1791 to leave France. He sought refuge at Heidelberg, where he composed his treatise entitled *Théorie du pouvoir politique et religieux* (Constance, 1796). After his return from exile he was appointed by Napoleon to the position of councilor of the University of Paris, and subsequently held several political offices under Louis XVIII and Charles X. In 1830 he renounced the peerage, to which he had been raised by Louis XVIII, and returned to his native place, where he died in 1840. His collected works were published in twelve volumes (Paris, 1817-1819).

DOCTRINES

De Bonald's philosophy is based on his *theory of language*. Language, he teaches, is not an invention of man; for in order to invent it, man should think, and he cannot think without words: "*Il faut penser sa parole avant de parler sa pensée.*" Language, therefore, was *given* to man by God himself; and as language implies a knowledge of the essential truths of the religious, metaphysical, moral, and political orders, such truths must have been conveyed to primitive man together with language. Since the history of philosophy shows that human reason is of itself incapable of arriving at a knowledge of these truths, philosophical method demands that the *divine revelation* and *tradition* on which our knowledge of such truths depends should be set up as the *supreme criterion of truth*. This account of the origin of language implies that *social organization* of some sort existed from the beginning, and that political authority had not its origin in a *social contract*. Developing the principles of his speculative system and applying them to the study of the social life of man, De Bonald teaches that the family is the social unit; that the state is not a union of individuals but of families; that in every political society there are three moral

personalities, represented by the words *power*, *minister*, and *subject*; that in every state there should exist between these personalities union and distinction; and that such union and distinction are best maintained in a monarchy in which both the authority of the ruler and that of the ministers are hereditary.

LAMENNAIS

Life. Félicité Robert de Lamennais, who was by far the ablest of the traditionalists, was born at St. Malo in 1782. He was educated by his uncle and by his brother, Jean-Marie, who was a priest and founder of a religious society. At the age of twenty-two he experienced the religious crisis of his life. From this time forward he set aside all the doubts which had troubled his youth, spent for the most part in desultory reading, and gave himself up to study and prayer at La Chênaie, the villa which Maurice de Guérin has so vividly described. After a brief sojourn in England, Lamennais returned to France, and in 1816 was ordained priest. During the years 1818-1830, besides publishing the *Essai sur l'indifférence en matière de religion*, he contributed to the *Conservateur* and to other monarchical periodicals articles in which he attacked the Revolution and defended the rights of the Church. So great was the favor which these articles found at Rome that Leo XII proposed to elevate Lamennais to the dignity of cardinal. From the publication of *l'Avenir*, which first appeared in 1830, dates a new era in Lamennais' life. The motto of the group of distinguished contributors to this celebrated journal was *Dieu et la liberté*, as *Dieu et le roi* was that of the royalists. They defended freedom of conscience, freedom of education, and freedom of the press; they advocated the separation of Church and State, and the rescinding of the Concordat; they proclaimed the coming triumph of democracy and the abolition of hereditary monarchy. These views naturally provoked opposition. In 1831 the three principal writers engaged on the paper, Lamennais, Lacordaire, and Montalembert, went to lay their case before the Holy See. In the following year Gregory XVI issued the encyclical *Mirari Vos*, condemning the doctrines advocated in the columns of *l'Avenir*. Lamennais submitted at first, but later, as is well known, recalled his adhesion to the papal decision, and, in the *Paroles d'un croyant* (1834) and in the *Affaires de Rome*, made open war on the Church and on the whole existing order. In 1841 appeared the *Esquisse d'une philosophie* in four volumes, Lamennais' greatest constructive work. In 1834 he

threw in his lot with the revolutionary party, and in 1841 was elected to the Chamber of Deputies. He died unreconciled to the Church in 1854.

Sources. During Lamennais' lifetime his works were collected and published in twelve volumes (Paris, 1836-1837). Subsequently, several treatises not contained in this edition were published. For full bibliography compare Molien et Duine, *Lamennais, sa vie, ses idées* (Lyons, 1898). Consult also Gibson's *The Abbé de Lamennais and the Liberal Catholic Movement in France* (London, 1896).

DOCTRINES

Traditionalism. In the *Essai sur l'indifférence* Lamennais appears as the champion of orthodox Christianity. He assails the fundamental tenet of rationalism and endeavors to prove the inability of individual human reason to arrive at a knowledge of truth. Having shown that *the individual mind is incapable of attaining certitude*, he proceeds to establish a new criterion of truth, namely the verdict of the collective reason,—in other words, the universal consent of mankind. By means of this criterion he proves the truth of theism, revealed religion, and Catholicism. Lamennais' traditionalism appears when (as in *Essai*, Tome II, chap. xvi) he refers the verdict of the collective reason (*raison sociale*) to the illumination of a higher reason.¹

Philosophical Synthesis. In the *Esquisse d'une philosophie* Lamennais appears as a synthetic philosopher. To the traditionalism which he professed in his earlier work he here adds an element of *mysticism*, teaching that tradition is to be supplemented by faith, that God is the first object of philosophy, and that the finite is to be known by means of the infinite. With this Neo-Platonic mysticism he mingles a strange form of *rationalism*; he maintains, for example, the identity of the supernatural with the natural order of truth, and teaches that the Trinity is an object of philosophical speculation. Finally, he introduces an *element of pantheism*, teaching that while there are two

¹ Cf. Gibson, *op. cit.*, pp. 59 ff.

classes of being, namely finite and infinite, there is but one substance, and that substance is God.

Among those who are influenced to a greater or less degree by Lamennais' philosophical doctrines were **Gerbet** (1798-1864), **Rohrbacher** (1789-1856), **Bautain** (1795-1867), **Bonnetty** (1798-1879), **Ventura** (1792-1861), and **Gratry** (1805-1872). Of these, Bautain, Bonnetty, and Ventura developed traditionalism into a system of *fideism*, substituting for the universal consent of mankind faith in God and in the doctrines of the Scriptures and of the Church, while Gratry in his celebrated work, *De la connaissance de Dieu*, developed a system of *ontologism*.

Historical Position. The traditionalists, fideists, and ontologists of this period were all actuated by the same motive, — the desire to offset the materialistic scepticism of the age of enlightenment and to place theism and Christianity on a firmer basis than that which individual speculation can furnish. But, as Gratry himself pointed out, the attempt to discredit individual reason could not but result in the discredit of religion, so that, far from curing religious indifference, philosophical indifference was calculated to aggravate the evil. This is the sentence which the Church pronounced in condemnation of traditionalism.¹

2. **The Psychologico-Spiritualistic School** was, like the traditionalist movement, an attempt *to counteract the influence of scepticism and materialism*. But, instead of turning to tradition and authority for the principles out of which it was to build a spiritualistic philosophy, this school turned to Cartesian psychology and restored psychological introspection to its place as a supreme criterion of philosophical truth.

Maine de Biran² (1766-1824) belonged at first to the ideological school of De Tracy; later, however, he developed a system of his own, based on the importance of internal reflection as a

¹ Cf. Denzinger, *Enchiridion* (Ed. VII), p. 360.

² Cf. Fouillée, *Histoire de la philosophie*, pp. 418 ff.

method in philosophy. By means of this reflection we become aware of the *voluntary effort* which distinguishes our external from our internal experience. In this way we arrive at a knowledge of *self* as distinct from *not-self*, and at an understanding of the true nature of mental life and mental phenomena. For the abstract metaphysician the soul must remain an unknown quantity; for the advocate of sensism also it must remain unknown as to its true nature, because the sensist is unable to avoid the interpretation of internal phenomena in terms of external causes. The only legitimate method in philosophy is that of *internal reflection*.

During the last years of his life De Biran abandoned the standpoint of psychological experience for that of mystic intuition. To the two stages of life, that of *representation*, which animals possess, and that of *volition* (or rather of sensation and volition united in perception), he now adds a third, that of *love*, — the spiritual life in which representation and volition are absorbed in the life of supernatural grace.

Royer-Collard (1763–1845), who was more distinguished as a statesman than as a philosopher, introduced into France the principles of the Scottish school, and thus prepared the way for the eclecticism of Cousin.

Victor Cousin (1792–1867), borrowing from Leibniz the principle that "systems are true by what they affirm and false by what they deny," sought to unite in one *eclectic* system Platonism, Neo-Platonism, and German transcendentalism, using the criterion of the Scottish school — common sense — as his guiding principle. His works consist of lecture courses (published 1815–1820 and 1828–1830), and *Fragments philosophiques* (published in five volumes, 1866).

Cousin, with whom the influence of German speculation was at one time preponderant, maintained that the *impersonal reason* has an immediate intuition of the Absolute. Later, however, he went back to the Cartesian position and restored individual

introspection to its place in philosophical method. At a still later period he seems to have reduced philosophy to a matter of merely historical interest. He taught that all philosophical systems may be arranged under four heads: *sensism*, *idealism*, *scepticism*, and *mysticism*; that in each of these there are elements of truth; and that the whole truth is to be found in a syncretic union of those doctrines which common sense judges to be true.

Théodore Jouffroy (1796–1842) took the extreme spiritualistic view of the relation between physiology and psychology, treating them as branches of science which have nothing to do with each other. His *eclecticism* appears in the following saying: "There are two ways in which the thinking man can win peace for his soul and rest for his spirit; the one is to possess, or to believe he possesses, the truth respecting the questions which interest humanity; the other is to perceive clearly that truth is unattainable and to know why it is so."¹ There are, he maintains, limits to the horizon of science, and it is the task of science gradually to determine those limits. Here we observe the practical spirit which appears in more systematic form in positivism.

3. **Positivism.**² **Auguste Comte** (1798–1857) is the founder of positivism. Many influences went to form his system of thought, — the sensism of Diderot, the criticism of Kant, the common sense of the Scottish school, the scepticism of Hume, and the mysticism of the Middle Ages. Comte stood in relations of personal friendship with Saint-Simon, John Stuart Mill, and Littré. His principal work is his *Cours de philosophie positive*, published 1839–1842 (translated by Harriet Martineau, London, 1853).

¹ Cf. Höffding, *op. cit.*, II, 313.

² Cf. *Archiv f. Gesch. der Phil.*, Bd. VII, Heft 1 und 2 (1900–1901). Consult Mill, *Comte and Positivism* (London, 1865), E. Caird, *The Social Philosophy and Religion of Comte* (Glasgow, 1885).

Relativity of knowledge. The critical or destructive aspect of positivism appears in its *denial of the validity of metaphysical speculation* and in its *abolition of final causes and of the absolute*. Our knowledge, according to positivism, is confined to facts and the relations of facts. We do not know the essences of things; all knowledge is therefore limited to our sense-knowledge of facts and to the higher kind of organized knowledge, which is a knowledge of the relations of facts. It is futile to inquire into the first origin or the ultimate destiny of the facts which we know: *positive* philosophy confines its inquiry to the investigation of the relations existing between facts. At the same time, positivism is far from giving its sanction to that empiricism which merely studies facts as isolated phenomena; for the knowledge of isolated phenomena is valueless unless it be referred to a law or theory by which facts are explained.

Law of the three stages. Positive knowledge begins when we learn to explain phenomena by their laws. Now this stage of knowledge was preceded, in the development of human thought, by two preliminary stages, the metaphysical and the theological. The *law of the three stages* is as follows: human thought passed successively through the *theological*, the *metaphysical*, and the *positive* stage, which correspond to the childhood, youth, and manhood of science. In the theological stage of thought, every phenomenon was referred to the voluntary action of supernatural intelligent beings, and fetichism, polytheism, and monotheism became successively the explanation of natural events; in the metaphysical stage of thought, abstract occult causes took the place of the supernatural entities of the theological period, and events were explained by referring them to chemical force, vital force, substantial forms, etc.; finally, in the positive stage of thought, occult and abstract causes are discarded, and phenomena are explained by means of *laws*. This law of three stages is germinally contained in the writings of **Turgot** (1727-1781).¹

¹ Cf. Fouillée, *Histoire de la philosophie*, p. 426.

Classification of sciences. Some of the sciences have already attained the positive stage, in which they deal merely with concrete facts and laws; others are still in the metaphysical or the theological stage. Taking the positive sciences in the order of increasing complexity, Comte reduces them to six, namely, *mathematics, astronomy, physics, chemistry, biology, and sociology*. This arrangement indicates the order in which the sciences have arrived at the positive stage and also the order of dependence, each science being dependent on those which precede it. *Metaphysics* finds no place in the classification, and *psychology* is included under *biology*.

With regard to *sociology*, it is Comte's aim to make it a positive science, and to this project he devotes special attention. He starts with the doctrine that the relations of man to his fellow-men are subject to law, and proceeds to the discovery and formulation of the laws of the social order: (1) in the *social statics* (the inquiry into the conditions which constitute social equilibrium and insure the permanence of social states), and (2) in the *social dynamics* (the inquiry into the laws of social progress). In the former he lays down the principle that the harmony, solidarity, and mutual dependence of the different elements in social life depend on the proper adjustment of the selfish and the altruistic impulses of the individual. The selfish impulses constitute the conservative, while the altruistic impulses constitute the progressive, element in science, art, religion, politics, and industry. In the *social dynamics* Comte makes use of the principle of development from *militarism* through the *juristic* phase to the *industrial* phase of human society, — three stages which correspond to the *theological, metaphysical, and positive* stages of intellectual development.

Mysticism. In his later writings Comte evinces a decided leaning towards the principles of mysticism. He abandons the view that intellectual development is paramount, and that the stage of positive science is the highest aim of human activity

and of social amelioration. In his earlier works he was content with expressing his admiration for "everything great and deep which the Catholic system effected during the Middle Ages"; now, however, he has recourse to the Catholic system for direct inspiration, and learns from the study of the *Imitation of Christ* to put the spiritual and emotional above the intellectual as a standard of values. He aims at *making positivism a religion*, of which he himself is to be the first pontiff. The objects of veneration in this new religion are to be the "great being" (*humanity*), the "great medium" (*world-space*), and the "great fetich" (*the earth*), which are to form the positivist trinity. Nature must be looked upon as essentially endowed with life, and all humanity is to form one family. There must be universal and whole-souled adhesion to the dogmas of the positive religion, all freedom of inquiry being rigorously prohibited, the only matter in which individuality is permitted being that of private devotion, by which each may venerate some particular person, living or dead, as his guardian angel.

Among the most distinguished of Comte's disciples was the well-known lexicographer, **É. Littré** (1801-1881), who after having posed as the "saint of positivism" was eventually converted to the Catholic Church.

Historical Position. It is hardly necessary to point out here the superficiality of the positivist doctrine of knowledge, the inaccuracy of Comte's historical formula (law of three stages), and the inadequacy of his classification of sciences. Positivism has had greater and more widespread influence in England than in France, where the defection of its founder from the principles of intellectual positivism did much to discredit the system.

4. The Sociological School.¹ Mention has already been made of **Saint-Simon** (1760-1825) among those who had a determining influence on the formation of Comte's idea of philosophy. Saint-Simon did not formulate a system of speculative thought ;

¹ Cf. Paul Janet, *Saint-Simon et le Saint Simonisme* (Paris, 1878).

he represents, however, a tendency which may be designated as *industrialism*, and which took definite form and received systematic development in the writings of the French sociologists who flourished about the middle of the nineteenth century. The best known of the Saint-Simoniens, as they are called, are **Augustin Thierry** (1795–1856), **Pierre Leroux** (1797–1871), and **Jean Reynaud** (1806–1863). These writers favored a reorganization of the social order on the basis of material progress, advocating the substitution of *industrial and economic ideals* for intellectual and æsthetic ideals in political and social life. Things, they maintained, not men, must be exploited: the material world must be developed. [Saint-Simon himself had the greatest respect for the social organization of the Middle Ages. The new era, he maintained, has so far been a period of social and spiritual chaos out of which a new Christianity must be developed, — a Christianity which, however, will be more of a religion of this life than mediæval Christianity was. This idea was taken up by **Enfantin** (1796–1864), who became the *père suprême* of the new religion, and not only preached but also practised the doctrines of socialism and communism in the community which he founded.

Opposed to the socialists of the school of Saint-Simon were those sociologists who believed that the present social order is sound, and that, if free play be given to the industrial forces now existing, they will of themselves produce harmony and social well-being. *Laissez faire, laissez passer* may be said to have been the motto of this school, to which **J. B. Say** (1767–1832) and **Bastiat** (1801–1850) belonged. **Sismondi** (1773–1842), while protesting against the *laissez faire* doctrine, adopted a modified form of political optimism and advocated the intervention of the state for the purpose of directing the social forces towards the general happiness.¹

¹ For origin and meaning of the phrase *laissez faire*, cf. *Dictionary of Philosophy* (ed. Baldwin), Vol. I, article, "Laissez Faire." Cf. Ingram, *History of Political Economy* (New York, 1894.)

CHAPTER LXIX

ENGLISH PHILOSOPHY

Contemporaneously with the deistic and the general empirical movement of the eighteenth century there arose in England the school of *associational psychology* and *utilitarian ethics*, which dominated English thought during the greater part of the nineteenth century.

Associational Psychology.¹ The physician **David Hartley** (1705–1757) is regarded as the founder of the association school of psychology. He reduces all mental phenomena to the *sensation and association of vibrations* of the white medullary substance of the brain and spinal cord. He does not, however, identify the brain with the thinking substance, or soul; for vibrations merely affect the body, the sensation of vibrations affecting the soul. Sensations on being repeated leave *traces* which are *simple ideas*. Simple ideas are, by association, amalgamated into *complex ideas*. Similarly, *assent* and *belief* are to be explained by association. Hartley protests against the materialistic identification of soul with body; he maintains that there is a correspondence between cerebral and psychical processes, but contends that the latter cannot be reduced to the former.

Joseph Priestley (1733–1804), theologian, philosopher, chemist, and physicist, brought out the materialism which was latent in Hartley's psychology. He teaches that *the soul is material*, that thought is a function of the brain, and that psychology is merely the physics of the nerves. He maintains, however, that psychological materialism does not imply the denial of the immortality of the soul or of the existence of God.

Priestley is best known by his great contribution to chemical science, — the discovery of oxygen (1774).

¹ Consult Bower, *Hartley and James Mill* (London, 1881); cf. Porter's Appendix to Ueberweg's *History of Philosophy*, II, 421 ff.

Erasmus Darwin (1731–1802), who was a botanist, philosopher, and poet, is reckoned among the associationists of this period. In his *Zoonomia, or the Laws of Organic Life* (London, 1794–1796), he teaches that nature is made up of two substances: *matter*, which produces motion, and *spirit*, which receives and communicates motion. He teaches further that motion is of three kinds, *gravitation*, *chemistry*, and *life*. To the last-named kind of motion belong *ideas*, which are defined as “contractions, motions, or configurations of the fibers which constitute the immediate organs of sense.” All the complex phenomena of mental life, namely sensation, comparison, judgment, reasoning, volition, are explained by the association of ideas which come to us not singly but in companies or tribes.

This associational psychology necessitates the utilitarian view of human conduct, — the view, namely, that certain actions are to be performed mainly or primarily because they are means to our enjoyment. This principle was developed into a system of ethics by Jeremy Bentham.

Utilitarian Ethics.¹ The founder of modern English utilitarianism is **Jeremy Bentham** (1748–1832). In his *Introduction to the Principles of Morals and Legislation* (1789) and in his *Deontology* (1834) he formulates the principle that the end of morality is “the greatest happiness of the greatest number.” Utility means the power of an action to produce happiness. Bentham's system has consequently been described by J. S. Mill as *utilitarianism*.² In ultimate analysis it is hedonism; for it teaches that “every virtuous action results in a balance of pleasure.” It is, however, a hedonism which unites altruism with egoism; for it maintains that while each one's primary care should be for his own welfare, the interest of the individual is inseparable from

¹ Cf. Leslie Stephen, *English Utilitarians* (3 vols., London, 1900); Albee, *History of English Utilitarianism* (New York, 1902).

² Mill was the first to bring this word into common use. Bentham, however, had employed it.

that of the community. The *determinants of utility* are, according to Bentham, *the act, the circumstances, the intention, and the consciousness*, all of which should be taken into account in the estimation of the moral value of an action. All virtue he reduces to two kinds, *prudence* and *benevolence*.¹

Revived Associationalism and Utilitarianism. The most important of Bentham's co-workers was **James Mill** (1773–1836), author of the *Analysis of the Phenomena of the Human Mind* (1829).

In *psychology* James Mill combines the doctrines of Hartley with those of Hume, teaching that *sensations* are kinds of feeling, and that *ideas* are what remains after the sensations have disappeared. He was the first to formulate the doctrine of *inseparable association*, by which he explains *belief* of every kind, — belief in events, belief in testimony, and belief in (assent to) the truth of propositions. Similarly, by means of association, he explains the phenomena of volitional and emotional life.

In *ethics* James Mill reasserts Bentham's doctrine that *moral value is identical with utility*, and proceeds to give a more definite method of estimating moral worth. He distinguishes three successive stages in the evolution or education of the moral sentiments: namely, the association with certain actions of pleasure or pain, the association with certain actions of the pleasure or pain arising from the praise or blame of others, and finally, the association with certain actions of the idea of future praise or blame.

JOHN STUART MILL

Life. John Stuart Mill, son of James Mill, was born in London in 1806. From 1823 to 1858 he was clerk and chief examiner of correspondence at the India House. The remainder of his life, with the exception of two years (1865–1868), during which he was member of Parliament, was spent at Avignon, where he died in 1873.

Sources. Mill's most important philosophical works are the *System of Logic* (1843), *Utilitarianism* (1863), and *An Examination of Sir William*

¹ Cf. Falckenberg, *op. cit.*, p. 457. (English trans., p. 565).

Hamilton's Philosophy (1865). He contributed valuable essays and treatises to the literature of social and political philosophy and to the history of positivism. Consult Bain, *John Stuart Mill, a Criticism* (1882); Douglas, *John Stuart Mill* (Edinburgh, 1895).

DOCTRINES

Logic. Mill defines logic as the science of the operations of the understanding which are concerned in or subservient to the estimation of evidence; and evidence he defines as "that which the mind ought to yield to, not that which it does or must yield to."¹ His logical inquiry includes, therefore, an investigation of the nature of mental assent, and an empirical analysis of intuition and belief, as well as of judgment and reasoning; so that in spite of Mill's frequent repudiation of the title of metaphysician, he is obliged in his *System of Logic* to take up the study of many of the fundamental problems of metaphysics. Thus, in the chapter entitled "Of the Things denoted by Names,"² he draws up the following *scheme of categories*: (1) *feelings, or states of consciousness*; (2) *minds which experience these feelings*; (3) *bodies which cause certain of these feelings*; and (4) *the successions, coexistences, likenesses, and unlikenesses between feelings or states of consciousness*. Having, however, resolved to make experience the sole source of knowledge, and to reject all *a priori*, or intuitive, knowledge, Mill is obliged to reduce *body* to "the permanent possibility of sensations," and *mind* to "the series of actual and possible states." He is aware of the difficulty incident to any phenomenalistic concept of mind; he cannot see how a series can be aware of itself as a series, and admits that "there is a bond of some sort among all the parts of the series which makes me say that they were feelings of a person who was the same person throughout, and this bond, to me, constitutes my ego."³

¹ *Logic*, Bk. III, Chap. 21.

² *Op. cit.*, Bk. I, Chap. 3.

³ Cf. notes to the *Analysis*, II, 175. Mill's notes to his edition of his father's works are important sources of information with reference to his own psychological doctrines.

Here Mill definitely abandons the associationist view of matter and mind, and practically admits a noumenal cause of sensations and a noumenal mind, thus opening, as some one has said, a trapdoor in the middle of his own philosophy.

Insisting on the principle that we must make experience the test of experience, Mill maintains that the *fundamental axioms of logic and mathematics* are merely generalizations from experience, that the law of contradiction is simply a summing up of the experience which tells us of the incompatibility of belief and non-belief, and that the peculiar accuracy supposed to be characteristic of the first principles of geometry is hypothetical, that is to say, fictitious.¹ The *law of causation* is likewise a generalization from experience; for causation is nothing but "invariable and unconditional sequence."²

Mill recognizes but one kind of *inference*, namely, inference *from particulars to particulars*. The syllogism he teaches is not a proof, for it involves a *petitio principii*: its function is to decipher or interpret the major premise which is a record of particular experiences, these experiences being the only evidence on which the conclusion rests.³

Mill's most important contribution to logic is the formulation of the *rules and methods of experimental inquiry*. This is the most successful portion of his work, and it is this which has earned for him the title of the Aristotle of Inductive Logic. His success is, however, marred by his inability to give a satisfactory account of the basis of induction; the uniformity of nature, which he sets down as the ground of all induction, depends, according to him, on induction, and is not unconditionally certain.

Ethics. In the opening chapters of the sixth book of the *Logic*, Mill endeavors to show that the doctrine of philosophical necessity does not imply that our actions are performed under compulsion, but merely that they follow the motive causes by a

¹ *Logic*, Bk. II, Chap. 5.

² *Op. cit.*, Bk. III, Chap. 5.

³ *Cf. op. cit.*, Bk. II, Chap. 3.

certain unconditional sequence which renders the scientific study of human nature possible.¹

Mill adopts the utilitarian doctrine that in the *effects* of an action, that is to say, in its power of promoting happiness, we possess a clear and natural standard by which to judge its moral worth. With Bentham he holds that the aim of human action should be the promotion of *the greatest happiness of all sentient beings*. He differs, however, from Bentham in his analysis of the moral feeling, in his addition of qualitative to quantitative distinction of pleasures, and, in general, in his attempt to bring utilitarianism into closer harmony with the requirements of subjective ethics. He is an altruist, whereas Bentham was, in ultimate analysis, an egoist.

Alexander Bain (1818-1903), author of *Senses and Intellect* (third edition, 1868), *The Emotions and the Will* (third edition, 1875), *Mental and Moral Science* (third edition, 1872), and *Mind and Body* (third edition, 1874), etc., is one of the most distinguished recent representatives of the English school of psychology. He avails himself of the aid which *contemporary physiological science* affords in the study of mental phenomena, and while he is commonly reckoned among the associationists, he seems to abandon the fundamental tenet of associationism, when he acknowledges similarity as the basis of all association of ideas.

Doctrine of Evolution. *Evolution*, in the sense of a transition from the simpler to the more complex, from the lower to the higher forms of existence, is a concept almost as old as philosophy itself. The evolution of the physical universe from a primitive mass by a process of purely mechanical changes was implicitly contained in many of the ancient and in some modern systems of philosophy, notably in Descartes' and Kant's. The idea of development was applied to history by **Herder** (1744-1803), to astronomy by **Laplace** (1749-1827), to the zoological

¹ Cf. Dr. Ward's refutation of Mill in *Dublin Review*.

sciences by **Buffon** (1707-1788), **Lamarck** (1744-1829), and **Cuvier** (1769-1832), to anatomy and embryology by **Wolff** (1733-1794) and **Von Baer** (1792-1876), and to geology by **Lyell** (1797-1875). The history of evolution in the modern meaning of the word, namely that of the development of the sum of living beings from less perfect forms of existence, by means of natural causes, begins with the name of **Charles Darwin** (1809-1882), who was the first to establish the doctrine of development as a scientific theory in biology.¹

As in the case of Newton, Galileo, and Copernicus, Darwin's scientific discoveries, while belonging to the history of natural science, are of interest in the history of philosophy because of the *new point of view* which they established. For, just as Newton had unified the whole physical universe by means of a single law, so Darwin unified the phenomena of the biological world under a single concept, and revealed the existence of continuity in a region where up to that time continuity had not been scientifically demonstrated; and just as Lyell had shown that the present state of the earth's surface is to be explained by the agency of natural causes, which are even now at work, so Darwin undertook to show that the flora and fauna of the earth originated by development, and that the agencies in the process of development were the same as those which are in operation at the present time.

Darwin's method affords an interesting example of the use of inductive and accumulative argument. During his voyage on the *Beagle* (1831-1836) he began his observations on the fauna of South America, noting especially the geographical distribution of species and the similarity and difference existing between the present and preëxisting forms. On his return to England

¹ Consult *Truth and Error in Darwinism*, by Hartmann, trans. in *Journal of Speculative Philosophy*, Vols. XI-XIII; Wallace, *Darwinism* (London, 1889); Romanes, *Darwin and after Darwin* (3 vols., London, 1892-1895); cf. Weber, *op. cit.*, pp. 560 ff.; also T. H. Green, *Works*, I, 373 ff.

Malthus' (1766–1834) *Essay on Population* suggested to him the idea of the *struggle for existence*. This may be regarded as his provisional hypothesis, to the verification of which he devoted twenty-one years preliminary to publishing his celebrated work, the *Origin of Species* (1859). The observations on which the process of verification is based may be reduced to (1) observations of the effect of artificial selection, (2) observations of the kinship existing between extinct species and species which are extant, (3) observations of the geographical distributions of animals, and (4) observations of the embryological development of animals. In the work entitled *The Descent of Man* (1871) Darwin applied the evolution theory to the origin of the human species. He was, however, willing to concede that there are what have since been called "gaps" in evolution; he confessed his inability to account for the origin of life, and always regarded the first beginning of variation as something mysterious.

Darwin laid the foundation of modern *evolutionistic ethics* by referring the moral feeling to natural selection, or the struggle for existence, which fosters such qualities and faculties in the individual as confer the greatest benefit, not on the individual, but on the group or species.

A. R. Wallace (born 1822), who shares with Darwin the honor of establishing the doctrine of natural selection, was more careful than Darwin to exclude from the general process of development the higher powers of the human mind, and to give a large scope to the operation of the teleological principle in the evolutionary process.

W. K. Clifford (1845–1879), **John Tyndall** (1820–1893), **George J. Romanes** (1848–1894), and **Thomas Huxley** (1825–1895) are the most distinguished among those who applied the Darwinian doctrine to the different departments of natural science. It was the last mentioned who in 1859 first used the word *agnostic* to designate one who is conscious of the inadequacy of our knowledge to solve the problem, What is the reality corresponding to

our ultimate scientific, philosophical, and religious ideas?¹ None of these men, however, with the exception of Clifford, attempted to construct a system of metaphysics, or to evolve a theory of reality from the principles of evolutionistic philosophy. This task was reserved for Spencer.

HERBERT SPENCER

Life. Herbert Spencer² was born in 1820 at Derby. It was at first intended that he should adopt the profession of teacher, to which his father belonged; but he decided to take up civil engineering. At the age of twenty-five he abandoned this profession to devote himself to literary work. In 1850 appeared his first important publication, entitled *Social Statics*. This was followed by the *Principles of Psychology* (1855), and *Progress: its Law and Cause* (1857), in which, two years before the publication of Darwin's *Origin of Species*, the view was expounded that all development is a transition from homogeneity to heterogeneity, and the principle of evolution was enunciated as a universal law. The *First Principles* (1862), *Principles of Biology* (1863-1867), *Principles of Sociology* (1877 ff.), and *Principles of Ethics* (1879-1893) form parts of a scheme of *Synthetic Philosophy*.³ Spencer died December 8, 1903.

DOCTRINES

The *historical antecedents* of the synthetic philosophy may be reduced to three: (1) from Hamilton and Mansel, and thus ultimately from Kant, Spencer drew his metaphysical principles, namely, relativity of knowledge and agnosticism; (2) from Comte and the Comtists he derived the positivism which appears in his definition of the scope of science and in a general way in his plan of the coördination of sciences; and (3) from Wolff the anatomist, from Von Baer the embryologist, and from

¹ Cf. Flint, *Agnosticism* (New York, 1903).

² Cf. Hudson's *Introduction to the Philosophy of Herbert Spencer* (New York, 1894).

³ For the outlines of this scheme, cf. Spencer's *Prospectus*, prefixed to the *First Principles*; cf. also Collins' *Epitome of the Synthetic Philosophy* (New York, 1889). Consult Bowne, *The Philosophy of Herbert Spencer* (New York, 1874).

Lyell the geologist he borrowed the principle of development which the publication of Darwin's work elevated to the rank of a scientific law in the biological world.¹

1. **Agnosticism.** Neither scientific ideas nor religious beliefs can express the ultimate nature of reality. The highest scientific ideas, such as space, time, matter, involve contradictions (antinomies), and theologians themselves admit the inadequacy of our idea of the Infinite; for "to think that God is as we think Him to be would be blasphemy." Moreover, the nature of consciousness itself shows that all knowledge is relative. The conclusion, therefore, is inevitable, that *ultimate religious ideas and ultimate scientific ideas are merely symbols of the actual, not cognitions of it*, and that "if religion and science are to be reconciled, the basis of reconciliation must be this deepest, widest, and most certain of facts, — that the power which the universe manifests to us is utterly inscrutable." The ultimate philosophical, as well as the ultimate religious, is unknown and unknowable.² Therefore, when Spencer teaches that the ultimate, or Absolute, reveals itself in the forms and laws under which phenomena occur, — "The persistent impressions, being persistent results of a persistent cause, are for practical purposes the same as the cause itself, and may be habitually dealt with as its equivalents,"³ — he practically abandons the position of the agnostic and confesses that the Absolute is not utterly unknowable.

2. **Definition and Data of Philosophy.** All knowledge is confined to the relations of things. Common knowledge is ununified knowledge; science is partially unified knowledge; *philosophy is completely unified knowledge*. The *data* of philosophy are: (1) the existence of likenesses and differences, as is proved by the permanence of our consciousness of congruity and incongruity; (2) the distinction of *self* and *not-self*, the former being

¹ Cf. McCosh, *Realistic Philosophy*, II, 255 ff.

² *First Principles*, P. I.

³ *Op. cit.*, par. 47.

constituted by the current of *faint* manifestations, and the latter by the current of *vivid* manifestations, of the unknowable power; (3) space, time, matter, motion, and force, these being "certain most general forms" into which the manifestations of the unknowable are separated, and the reality of which science at every moment assumes; for by *reality* we are to understand *persistence in consciousness*, and the persistence of space and time consists in this, that they are the universal relations of coexistence and sequence, by which (as postulates) we think, while the persistence of matter, motion, and force consists in the indestructibility, continuity, and persistence, respectively, of these ultimate scientific ideas.

Passing now from these analytic truths, we come to inquire, What is the *law of universal synthesis*? What is the universal formula which shall combine all the particular formulas of science and philosophy? The answer is, *The continuous redistribution of matter and motion*, which involves the double process of *evolution* (an integration of matter and a dissipation of motion) and *dissolution* (a disintegration of matter and an absorption of motion). If, now, the word *evolution* is taken to designate the process of development in all its complexity, "Evolution is an integration of matter and concomitant dissipation of motion; during which the matter passes from an indefinite, incoherent homogeneity to a definite, coherent heterogeneity; and during which the retained motion undergoes a parallel transformation."¹ This is proved by induction to be the law of the physical universe and of psychic and social life. And just as in Hegel's philosophy, development implied three stages, so in Spencer's theory, evolution starts with the instability of the homogeneous, and proceeds, through the multiplication of effects and segregation, to the equilibration of forces which constitutes the impassable limit of evolution, — the point where dissolution begins.

¹ *Op. cit.*, par. 144. In the sixth edition (1901) of the *First Principles*, the word "relatively" is inserted before the words "definite" and "indefinite."

3. **Special Philosophy of the Sciences.** The other portions of the synthetic philosophy, namely the *special philosophy* of biology, psychology, sociology, and ethics, are merely the application of the evolution formula to the different branches of philosophic inquiry.

Biology. Spencer defines life as "the continuous adjustment of internal relations to external relations."¹ He then proceeds to the study of growth, function, adaptation, genesis, heredity, variation, etc. Taking up² the problem of the origin of life, he contrasts the special-creation hypothesis with the *evolution hypothesis*, and adduces in favor of the latter arguments from classification, embryology, morphology, and distribution. The *factors* in organic evolution are, he teaches, both internal and external.³ "He excludes all consideration of the question how life first arose, though it is clear that he regards the lowest forms of life as continuous in their essential nature with sub-vital processes."⁴ For Darwin's phrase, "natural selection," Spencer substitutes "the survival of the fittest."

Psychology. Applying to the study of mental phenomena the method found to be so fruitful of results in the study of vital phenomena in general, Spencer arrives at the conclusion that *among mental phenomena there are no organic differences*, — reflex action, feelings, instinct, intelligence being merely different stages in the process of development from the simple to the complex, from the indefinite to the definite, from the homogeneous to the heterogeneous.

With regard to the *substance of mind* Spencer holds that all mental action whatsoever is explained by the continuous differentiation and integration of *states of consciousness*. He is not, however, a phenomenalist: "Existence," he says, "means nothing more than persistence; and hence in mind that which

¹ *Principles of Biology*, par. 30.

² *Op. cit.*, Chap. V.

³ *Op. cit.*, pars. 148-158.

⁴ Sully, in *Encyc. Brit.* (ninth edition), article, "Evolution."

persists in spite of all changes, and maintains the unity of the aggregate in defiance of all attempts to divide it, . . . is that which we must postulate as the substance of mind in contradistinction to the varying forms it assumes."¹ This substance of mind is unknowable.

With regard to the *origin of ideas*, Spencer, rejecting on the one hand the empiricism of Locke and Hume, and on the other hand the absolute *a priorism* of Leibniz and Kant, teaches that while the universal and necessary elements of intellectual knowledge are *a priori* with reference to the individual, they are not *a priori* with reference to the race. Between the theory of the empiricist, who refers all the elements of knowledge to the experience of the individual, and that of the transcendentalist, who regards the universal and necessary elements of thought as "forms of intuition," Spencer finds a *via media*. In accordance with the general principle of evolution, he refers the elements characterizing intellectual thought to "organized and semi-organized arrangements," which, existing in the cerebral nerves of the child, sum up the experience of all his ancestors. Here as elsewhere Spencer seems to forget that the survival of the organized and semi-organized arrangements merely proves their practical utility in the struggle for existence, and can in no way guarantee their validity as tests of absolute truth.²

From such inherited dispositions arises our inability to conceive the contradictory of certain principles and truths of fact. This inability to conceive the contradictory is the ultimate test of all beliefs, the criterion of truth. The *universal postulate* may therefore be formulated as follows: "A cognition which we are obliged to accept because we cannot conceive its contradictory is to be classed as having the highest possible certainty."³

¹ *Principles of Psychology*, par. 59.

² Cf. Höffding, *op. cit.*, II, 474.

³ Cf. *Principles of Psychology*, par. 426.

Epistemology. Spencer's epistemology is comprised in his doctrine of *transfigured realism*. He rejects idealism on the ground of the priority, immediateness, and superior distinctness of the realistic conception of mental processes.¹ He next proceeds to show that "while *some* objective existence, manifested under some conditions, remains as the final necessity of thought, there does not remain the implication that this existence and these conditions are more to us than the unknown correlatives of our feelings and the relations among our feelings."² This realism "stands widely distinguished from crude realism; and to mark the distinction it may properly be called *transfigured realism*."³

Sociology. In his various treatises on sociology Spencer conceives society, after the manner of the individual organism, as possessing a variety of organs and functions, and as tending to evolve itself by a series of adjustments to the social and physical environment. He insists on the *innerness of the principle of social development*, and emphasizes the truth that societies and constitutions are *not made*, but *grow*. He is, however, careful to point out one very important distinction between the individual organism and the social organism: in the individual the parts exist for the sake of the whole, while in the society the whole exists for the sake of the parts. This distinction is overlooked in those forms of society in which *militarism* and *officialism* predominate. *Industrialism* is the basis of modern social reconstruction. The highest type of social organization will, however, be reached when freer scope shall be given to the play of those activities which are exercised for the sake of the satisfaction they afford, and not for the sake of obtaining the means of subsistence.

Ethics. Spencer's system of ethics may be briefly described as the substitution of *rational utilitarianism* for the *empirical utilitarianism* of the school of Bentham. The goal of the process

¹ *Op. cit.*, pars. 406-408.

² *Op. cit.*, par. 473.

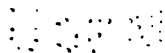
³ *Ibid.*

of ethical development is *the ideal man in the ideal state*, — a view which combines, as the earlier form of utilitarianism had combined, altruism with egoism. But instead of insisting on the "hedonistic calculus" of the earlier utilitarians, Spencer emphasizes the rational deduction of the moral ideal from the necessary laws, — physical, biological, psychological, and sociological, — the recognition of which, rather than the calculation of the happiness to which human action leads, furnishes the *cognitive basis for moral action*. Moral phenomena must be considered as part of the aggregate of phenomena which evolution has wrought out; the *moral sense* itself is a *product of evolution*: "I believe that the experiences of utility organized and consolidated throughout all past generations of the human race have been producing corresponding modifications, which, by continued transmission and accumulation, have become in us certain faculties of moral intuition, — certain emotions responding to right and wrong which have no apparent basis in the individual experiences of utility."¹

The most distinguished of the opponents of utilitarian ethics in England was Dr. Martineau (1805–1900), author of *Types of Ethical Theory* (1885). He defended what is known as the *preferential theory of ethics*, according to which the morality of an action is not to be judged by its pleasure-producing effect, but rather by the perfection of the motives inspiring it, virtue being defined as the rejection of lower and the adoption of higher motives.

St. George Mivart (1827–1900) occupied a unique position among the English representatives of the philosophy of evolution during the latter half of the nineteenth century. In *The Genesis of Species* (1871), *On Truth* (1889), etc., he appeared as the defender of theistic evolution, and sought to reconcile the evolutionistic hypothesis with the essential doctrines of Scholastic philosophy.

¹ Letter to Mr. Mill, quoted by Bain, *Mental and Moral Science*, p. 722.



Idealism. German idealism was first introduced into England by Samuel Taylor Coleridge (1772–1834) and Thomas Carlyle (1795–1881). During the latter half of the nineteenth century the Hegelian philosophy found many able exponents in Great Britain, of whom the most prominent are J. H. Stirling (born 1820), John Caird (1820–1898), Edward Caird (born 1835), and Thomas Hill Green (1836–1882).¹ Green's *Prolegomena to Ethics* (fourth edition, 1899) represents the first important contribution to English Hegelianism. Green considers that metaphysics is the foundation of ethics, and that *without a metaphysical theory a theory of ethics is "wasted labor."* The primary questions of metaphysics are: What are the facts of my own individual consciousness? and, What is the simplest explanation I can give of the origin of these facts? That is necessarily true which is required to explain my experience. Applying this test to the *evolution doctrine*, Green, while admitting the fact of the biological evolution of man, protests against any biological explanation which cannot account for the facts of individual consciousness. "If there are reasons," he writes, "for holding that man, in respect to his animal nature, is descended from 'mere' animals, . . . this does not affect our conclusion in regard to the consciousness of which, as he now is, man is the subject, — a conclusion founded on analysis of what he now is and does."²

The "*whole*" is not material, but spiritual, — a world of "thought relations" consisting of three main facts, *self*, *cosmos*, and *God*. Self is first in the order of knowledge: God the Eternal Consciousness, which manifests itself in the spiritual cosmos, is first in the order of being. "The unification of the manifold in the world implies the presence of the manifold to a mind, for which, and through the action of which, it is a related

¹ Cf. Fairbrother, *Philosophy of Thomas Hill Green* (London, 1896). Green's *Works* were edited by Nettleship (3 vols., London, 1885–1888).

² *Prolegomena to Ethics*, par. 83.

whole. The unification of the manifold of sense *in our consciousness* of a world implies a certain self-realization of this mind in us through certain processes (life and feeling) of the world which only exist through it."¹

In his *ethical doctrines* Green insists on self-reflection as the only possible method of learning what is the inner man or mind that our action expresses, and he emphasizes the importance of man's looking forward to a moral ideal to be attained by conscious effort, rather than backward to a series of natural changes through which man came to be what he is. "Our ultimate standard of worth is an ideal of personal worth," not the well-being of the race but the *perfection of human character according to the divine plan*.²

Historical Position. It is impossible to judge with anything like definiteness systems of thought, some of which are still in the process of formation, while others are in the process of dissolution. When, however, we look back over the course of English philosophy during the nineteenth century, two conclusions appear to be indisputable; namely, that the associationist account of the mind and of mental processes has been definitely abandoned, and that whatever changes the evolution doctrine may have wrought in the method and standpoint of philosophy, its importance as a contribution to ultimate philosophic truth must depend largely on whether it will materially affect the great gnostic idealistic movement, which during the last quarter of a century has apparently superseded the agnostic empirical movement. It is not to the evolutionistic synthesis of Spencer but rather to the idealistic constructions of such men as Green that we must look for a solution of the question, What is the present tendency, and what is likely to be the future trend, of philosophical speculation in England?

¹ *Proleg.*, par. 82.

² *Op. cit.*, par. 180-191.

CHAPTER LXX

ITALIAN PHILOSOPHY ¹

The founder of modern Italian philosophy is **Giovanni Battista Vico** (1668–1744), who, at the beginning of the eighteenth century, opposed the Cartesian method in philosophy and anticipated the *historical method* subsequently developed by Herder and Hegel. The mind, Vico teaches, can know only that which it can produce through its own activity; this activity is manifested in the historical development of civilization, the basis of which is Divine Providence. Human experience is, therefore, to be interpreted and rendered reasonable by referring it to the principles by which human nature has developed itself. In this development Vico distinguishes three stages: the *divine* (theocracy), the *heroic* (aristocracy), and the *human* (monarchy and democracy).

In the movement of philosophic thought in Italy during the nineteenth century we may distinguish

1. **Sensism and Empiricism**, of which the chief representatives are **Gioja** (1767–1829) and **Romagnosi** (1761–1835). These represent the Italian phase of the *sensistic philosophy of Condillac*, which, as we have seen, was dominant in France at the beginning of the nineteenth century.

2. **Criticism**, of which the chief exponent is **Pasquale Galuppi** (1770–1846), who, while he assumes the immediate consciousness of the ego and the objectivity of sensation, reduces the intellectual element of thought to the synthetic relations (*rapporti*) of identity and difference, which are *a priori* products of the activity of the mind. In this, as well as in his emphatic assertion of the supremacy of moral obligation, Galuppi betrays the influence of Kant.

¹ Cf. "Historical Sketch of Modern Italian Philosophy," by Botta, Appendix II to Ueberweg's *History of Philosophy*, II, 461 ff. Consult also the last (German) edition of Ueberweg's *History*, edited by Heinze.

3. **Idealism.** The principal representative of idealism in Italy during the nineteenth century is Antonio Rosmini.

ROSMINI

Life. Antonio Rosmini-Serbati (1797-1855), the founder of Italian idealism, was born at Rovereto near Trent. In 1821 he entered the priesthood, and in 1828 founded the Institute of Charity, a religious society devoted to corporal, intellectual, and spiritual works of charity. In 1848 he went to Rome as special envoy of King Charles Albert; in the same year he became minister of instruction in the papal cabinet and was considered a candidate for the honors of the cardinalate. After the murder of Rossi (November, 1848) and the flight of Pius IX to Gaeta, changes in the policy of the pontifical court necessitated Rosmini's retirement. The last years of his life he spent at Stresa, near Lago Maggiore, where he had established a house of his order. There he led a quiet, studious life, edifying his brethren by his many virtues, and especially by the humility with which he received the condemnation of two of his works.¹ He died in 1855.

Sources. The treatises in which Rosmini sets forth his metaphysical and psychological doctrines are *Teodicea* (1828), *Nuovo Saggio sull' Origine delle Idee* (1830), *Il Rinnovamento della Filosofia in Italia* (1836), *Antropologia* (1838), *Psicologia* (1846-1850), *Introduzione alla Filosofia* (1850), *La Logica* (1853), and *Teosofia* (1859). For full bibliographical list, cf. Davidson, *Rosmini's Philosophical System* (London, 1882).²

DOCTRINES

Rosmini distinguishes the matter and the form of thought, the matter being sensation, and the form being the pure intellectual element. Now the matter of thought is multiple and diverse; the form, however, is one and self-identical, namely, the intuition of *Being in its transcendental ideality* (*l'essere ideale, ente universale*). This intuition cannot result from experience,

¹ The pamphlet *Delle cinque piaghe, etc.*, and a project for a constitution. Cf. "Letter to the Master of the Sacred Palace," *Letters of Rosmini*, trans. by Gazzola, p. 664.

² Cf. Father Lockhart's *Life of Rosmini* (London, 1856); also, *Letters of Antonio Rosmini*, trans. by Gazzola (London, 1901). For list of Rosminian doctrines condemned by the Holy See, cf. *Rosminianarum Propositionum Trutina Theologica* (Romæ, Typis Vaticanis, 1892).

abstraction, or reflection : it is an innate concept and is of divine origin. Rosmini does not, it is true, expressly identify this idea of Being with the idea of God ; for he teaches that *l'essere ideale*, although it is necessary, eternal, immutable, and identical for all minds, is a principle of knowledge, not a principle of existence.¹ Nevertheless, Rosmini cannot consistently maintain a distinction between *l'essere ideale* and God ; because, although he maintains that God is both real and ideal (*l'essere reale-ideale*), he teaches that the reality of *l'essere iniziale* is a reality of pure indetermination. Indeed, in the *Teosofia*, all attempts at discriminating between *l'essere iniziale* and God are abandoned, and we are told that the former is something of the Word, which the Father distinguishes from the Word by a distinction which is merely logical (*distingue non realmente ma secondo la ragione dal Verbo*).² There is, therefore, in Rosmini's teaching only too much foundation for the almost unanimous verdict of his critics, that he was an ontologist³ and by implication a pantheist.⁴

In his account of the soul and its faculties, Rosmini teaches that the soul is not the substantial form of the body, but is united to it by a fundamental sensibility (*sentimento fondamentale*), that the essence of the soul is sensibility (*sentimento primitivo e sostanziale*), and that the soul becomes intelligent by the intuition of Being in its ideality (*essere ideale*).⁵

¹ *Il Rinnovamento*, Cap. 42. In reply to Gioberti, who argued that the idea of Being must be God, since it possesses divine attributes, Rosmini writes : " Every real being must be God or creature, but not so every ideal being. The idea of Being abstracted from God's reality is neither God nor creature, it is something *sui generis*, an appurtenance of God." Rosmini's *Short Sketch of Modern Philosophies and of his Own System*, trans. by Lockhart (London, 1882), p. xii.

² *Teosofia*, Vol. I, No. 490.

³ "The difference between our system and that of Malebranche lies not in fundamentals but in details" (*Sketch, etc.*, p. 30).

⁴ "La quiddità (ciò che una cosa è) dell'ente finito non è costituita da ciò che ha di positivo, ma dai suoi limiti" (*Teosofia*, Vol. I, No. 726).

⁵ Cf. *Antropologia*, Lib. IV, Cap. 5, No. 819, and *Psicologia*, P. II, Lib. I, Cap. 11, No. 849.

Ontologism. **Vincenzo Gioberti** (1801–1852), who was a priest, a revolutionary leader, a statesman, and a controversialist (*Il Gesuita Moderno*, his best known controversial work, appeared in 1846), opposed the philosophy of Rosmini and formulated a system of his own, which is characterized by ontologism. He begins as a metaphysician rather than as a psychologist; he does not examine the contents of the mind, nor does he subject mental processes to analysis; he simply *postulates a primitive intuition* with which constructive synthesis begins. The content of this intuition is not Being in its ideality nor God, but God as creating, — *Ens creat existentias*.

“Through the intuition of this principle, the mind is in possession at once of the real and the ideal; for the first member of the formula, *Being*, contains the object, the absolute idea as well as the absolute substance and cause; the second, *existences*, gives the organic multiplicity of contingent substances and causes and relative ideas; the third, *the creative act*, expresses the relation existing between the absolute and the relative, . . . the production of real and ideal existences from the Absolute.”¹ The *primum philosophicum* is, therefore, an organic truth containing in itself the *primum ontologicum* and the *primum psychologicum*. Gioberti’s posthumous works (published by Massari, 1856–1859) exhibit a more advanced form of ontologism than that which has just been sketched.

Among the later ontologists may be reckoned **Terenzio Mamiani** (1800–1885), who during the later half of the century associated his name and influence with the *rationalistic movement* represented by **Ferri** (1826–1895), **Ferrari** (1812–1876), and **Ausonio Franchi** (C. Bonavino) (1821–1895).

Positivism. The principles of positivism were defended by the three rationalistic writers just mentioned and taught systematically by **Roberto Ardigò** (born 1828), **Andrea Angiulli** (1837–1890), and others.

¹ Cf. Ueberweg, *op. cit.*, II, 498.

Hegelianism. The most distinguished of the Italian representatives of Hegelianism, **Augusto Vera** (1813–1885), was by education and long residence a Frenchman rather than an Italian. His works, some of which were composed in French, others in Italian, and others in English, are devoted to the interpretation and exposition of Hegel's philosophy.

Scholasticism. The history of Scholastic philosophy in Italy during the nineteenth century will be given in the chapter devoted to the history of Catholic philosophy.

Historical Position. The systems which have just been outlined do not, with the exception of Rosmini's idealism, exhibit any sustained effort at independent construction. The most distinctive trait of modern Italian philosophy is its tendency to treat religious and political philosophy in the controversial or polemical spirit, rather than in the spirit of constructive synthesis, — a tendency easily traceable to the influence of the events which determined the political history of Italy during the nineteenth century.

CHAPTER LXXI

AMERICAN PHILOSOPHY¹

The history of philosophy in America begins with **Jonathan Edwards** (1703–1758), a pupil of **Samuel Johnson** (1696–1772), who, during Berkeley's sojourn at Rhode Island, visited and corresponded with the distinguished advocate of immaterialism. Edwards was, however, influenced more by Locke than by Berkeley.² In his principal work, which is devoted to the

¹ Consult M. M. Curtis, *An Outline of Philosophy in America* (Western Reserve University, 1896); A. Leroy Jones, *Early American Philosophy* (New York, 1898); J. E. Creighton, *Philosophy of Kant in America* in *Kant-Studien*, II, 2 and 3, III, 1 and 2; Van Becelaere, *La phil. en Amérique* (Paris, 1904).

² On sources of Jonathan Edwards' idealism, cf. *Philosophical Review*, January, 1902.

discussion of the *freedom of the will*, he maintains that freedom, in the sense of self-determining power, is a contradiction, that true freedom (the quality of human action which raises it to the dignity of virtue) is a disposition of the heart, and that with this idea of freedom the foreknowledge and providence of God are easily reconciled. Edwards' *Works* were edited by S. E. Dwight (New York, 1844).

The disciples of Edwards, chief among whom were **Jonathan Edwards, the Younger** (1745-1801), and **Timothy Dwight** (1752-1817), confined their attention for the most part to the problems of freedom of the will, the nature of virtue, and the principles of the moral government of the universe; they also endeavored to supply a rational basis for the Calvinistic system of theology.

Benjamin Franklin (1706-1790) deserves mention among those who helped to stimulate an interest in philosophical speculation during the years that preceded the Revolution. The practical morality and the sagacious reflections of "Poor Richard" are Franklin's title to distinction as the "Socrates of America."

At the beginning of the nineteenth century **James Marsh** (1794-1842) called attention to German speculation. He was succeeded by **William Ellery Channing** (1780-1842), one of the leaders of the Unitarian movement, from which sprang the New England transcendentalism represented by **Ralph Waldo Emerson** (1803-1882) and **Theodore Parker** (1810-1860).

The Scottish philosophy was introduced into this country by **James McCosh** (1811-1894), who, after having taught logic and metaphysics at Queen's College, Belfast, came to America in 1868, and was appointed president of Princeton College in 1869. Dr. McCosh wrote *Intuitions of the Mind* (third edition, 1872), *Laws of Discursive Thought* (new edition, 1891), *First and Fundamental Truths* (1889), *Realistic Philosophy* (2 vols., 1887), etc. He opposed and criticised Kant, Hamilton, Mill, and Spencer, and advocated the common-sense philosophy, substituting the phrase "intuitions of the mind" for the expression "common sense."

In the writings of **Noah Porter** (1811–1892), author of *The Human Intellect* (1868) and *The Elements of Intellectual Science* (1871), the doctrines of the Scottish school are modified by the introduction of elements from German transcendental philosophy.¹

The most distinguished representative of ontologism in America was **Orestes A. Brownson** (1803–1876), who was born at Stockbridge, Vermont. Brownson joined the Presbyterian Church at the age of nineteen; three years later he became a Universalist minister. In 1832 he became a clergyman in the Unitarian Church, in 1836 he organized in Boston the Society for Christian Union and Progress, and finally in 1844 he joined the Catholic Church. He died in 1876. In *Brownson's Quarterly Review*, of which the first number was published in 1844, he championed Catholic claims and discussed literary, philosophical, and political topics of interest at the time. His *Works* were published by his son, H. F. Brownson (10 vols., Detroit, 1882), who is also the editor of a little volume of extracts entitled *Literary, Scientific, and Political Views of Orestes A. Brownson* (New York, 1893).

Brownson distinguishes between *intuition* (direct perception) and *reflection*. The latter can contain nothing which is not first perceived directly by intuition: philosophy "begins and ends with thought. . . . Thought is, for us, always ultimate."² Now, "the careful analysis of intuitive thought discloses three elements: subject, object, and their relation, always distinct, always inseparable, given simultaneously in one and the same complex fact."³ This complex fact is "given" by the action of creation, — *Ens creat existentias*, — in which subject, object, and the activity of object are synthetically united. This is at once the *primum philosophicum* and the *primum psychologicum*: "That of which we have immediate intuition in every process

¹ Cf. Falckenberg, *op. cit.*, English trans., p. 565.

² *Works*, I, 58.

³ *Op. cit.*, II, 42.

of reasoning and without which no such process would be possible or conceivable, is God the Creator."¹ "When Gioberti speaks of the ideal formula, defines it to be *Ens creat existentias*, and calls it the *primum philosophicum*, he speaks of the real, intuitive formula, not of the conceptual. He presents this formula as the *primum* both of things and of science."²

Among the American representatives of Spencerian philosophy mention must be made of **Laurens P. Hickok** (1798–1888) and of **John Fluke** (1842–1901). The latter in his *Outlines of Cosmic Philosophy* (1874) presents in somewhat popular form the tenets of evolutionistic philosophy. The former represents an important attempt to modify the *synthetic philosophy* so as to render it more compact in its inherent consistency and *more consonant with theistic ideas*. For the Spencerian conception of the mind, as purely passive, Hickok substitutes the notion of a mind partly passive and partly active. The activity of mind is, in its cosmic aspect, the active reason of God, through Whose absolutely free self-limitation there have been created certain mechanical "forces" which constitute the "thing-in-itself," — the external world prior to our consciousness of it.³

CHAPTER LXXII

CATHOLIC PHILOSOPHY IN THE NINETEENTH CENTURY

Philosophy is more closely allied to theology and to literature than is any of the other sciences. If, therefore, the manifold relations of philosophy to literature entitle us to speak of German, French, and English philosophy, surely the intimate alliance of philosophy with the doctrinal system of the Church justifies the appellation *Catholic philosophy*.

¹ *Op. cit.*, I, 270.

² *Op. cit.*, I, 445.

³ Cf. Appendix to Seelye's translation of Schwegler's *History of Philosophy* (New York, 1894), pp. 467 ff.

Few of the names of those who represented Scholastic philosophy during the seventeenth and eighteenth centuries have risen into prominence in the history of philosophy. The following, however, rendered considerable service to Scholastic philosophy by their interpretations and expositions of the schoolmen: **Cosmo Alemanni** (1559–1634), **Sylvester Maurus** (1619–1687), both of whom were Jesuits and taught at the Roman College,¹ the Dominican **Antoine Goudin** (1639–1695), the authors of the *Cursus Philosophiæ Complutensis* (Alcalá),² and the Franciscan **Claudius Frassen** (1620–1711), whose *Scotus Academicus* is being republished by the Franciscans of the College of Sant' Antonio (Rome, 1900 ff.). These belong to the seventeenth century. To the seventeenth century belong also **Caramuel** (1606–1682), **Roselli** (end of seventeenth century), whose *Summa Philosophica* is said to have furnished the basis for the Thomistic reconstruction of the nineteenth century, and **Guerinois** (1640–1703), whose *Clypeus Philosophiæ Thomisticæ*, etc., is an elaborate refutation of Cartesianism. To the eighteenth century belong Father **Boscovich**, S.J. (1711–1787), and Cardinal **Gerdil** (1718–1802). Father Boscovich was professor of philosophy and mathematics at the Roman College. He attained very great prominence by his theory of the *ultimate composition of matter*, which may be described as a modification of Leibniz' monadism. Matter, Boscovich taught, is composed of indivisible, unextended points, which were originally placed at a fixed distance from each other and endowed with the forces of attraction and repulsion.

¹ The works of these two commentators were reëdited, 1885–1891, by Father Ehrle, S.J.

² *Collegium Complutense philosophicum, hoc est Artium Cursus, sive Disputationes in Aristotelis Dialecticam*, etc. The authors were Carmelites of the convent of St. Cyril at Alcalá. The *Cursus Theologicus* of the Carmelites of Salamanca (commonly referred to as the *Salmanticenses*), which belongs also to the seventeenth century, is a theological commentary on St. Thomas' *Summa*. To the end of the sixteenth and beginning of the seventeenth century belongs the great Jesuit commentary, *Commentarii Collegii Conimbricensis S.J. in Octo Libros Physicorum Aristotelis*, etc.

Cardinal Gerdil defended the philosophy of Descartes and Malebranche, and advocated a *modified ontologism*.

During the nineteenth century Germany, France, Spain, and Italy produced a large number of distinguished philosophers who admitted in one form or another the supremacy of Christian revelation as contained in the teachings of the Catholic Church, and are on this account to be included in the history of Catholic philosophy.

Germany. In Germany **Franz Baader** (1765–1841), of whom mention has already been made,¹ opposed the anti-Christian tendencies in the philosophical systems of Kant, Fichte, Schelling, and Hegel. In his account, however, of the origin of the universe he shows traces of the influence of the transcendentalists, and in his theory of the soul he betrays the influence of Origen and the Gnostics. **Johann Frohschammer**² (born 1821) also occupied himself with the refutation of anti-Christian theories, devoting special attention to the criticism of materialism. But, like Baader, he was led by his study of the transcendentalists to profess a form of philosophic belief incompatible with Catholic dogma. In the work, *Die Phantasie als Grundprincip des Weltprocesses* (1877), he proposes *imagination* in place of the Hegelian *spirit* and Schopenhauer's *will*, as the immanent and transcendent principle of the evolution of the world. He is careful, however, to make a formal declaration of the superiority of God with respect to this principle of evolution. There is apparent in his writings a *tendency to rationalize theology* to the extent of bringing the mysteries of faith within the scope of philosophical speculation, — a tendency which became a principle openly avowed in the writings of **Georg Hermes** (1775–1831). Hermes makes reason the ultimate criterion of all truth, supernatural as well as natural, and attempts to establish by the aid of reason the dogmas of the Catholic faith. His doctrines

¹ Cf. p. 560. Also Stöckl, *Lehrbuch der Gesch. der Phil.* (1888), II, 333.

² Cf. González, *op. cit.*, IV, 337.

were condemned by the Church,¹ and his writings placed on the *Index* (1835). Another movement towards the identification of theology with philosophy is represented by **Anton Günther**² (1783–1863), who maintained that if revelation is necessary it is because of the “weakness of the understanding” which results from original sin; that, *of itself*, human reason is capable of proving all truth; but that in man’s present condition, faith is the foundation of all knowledge. These errors were condemned in 1857.³

The most remarkable of the German Catholic philosophers of this period was **Joseph Görres** (1776–1848), who, in *Die Christliche Mystik* and other writings, developed a fantastic system of spiritism. He maintained that, besides the visible material body, man possesses a subtle body composed of imponderable fluid which remains united to the soul after death and returns to earth with the soul whenever the latter appears as a ghost.⁴

Mention must also be made of **Franz Anton Staudenmaier** (1800–1856), who was associated with Günther and Frohschammer in the refutation of anti-Christian doctrines, while he differed from them in his adherence to strict orthodoxy and his condemnation of rationalism and semi-rationalism. It was, however, the Jesuit Father **Kleutgen** (1811–1883), author of the *Philosophie der Vorzeit* (1860 ff.), and **Dr. Albert Stöckl** (1823–1895), author of the *Geschichte der Philosophie des Mittelalters* (1864–1866), who rendered the greatest service to the cause of Scholastic philosophy in Germany, and prepared the way for the contemporary Neo-Scholastic movement in that country.

¹ Cf. Denzinger, *Enchiridion* (Ed. VII), p. 350.

² Cf. Stöckl, *op. cit.*, II, 345.

³ Cf. Denzinger, *op. cit.*, pp. 361 ff.

⁴ Görres’ true significance as a writer appears in his *Athanasius*, in which, by his eloquent and vigorous vindication of the principles of religious authority and religious freedom, he rallied the forces of Catholicity in Germany for the contest which has been so successfully waged in our own day. The *Görres-Gesellschaft* still adorns its literary productions with the figure of St. Athanasius.

France. In France the traditionalists and ontologists were succeeded by a group of distinguished *conférenciers* and apologists, who in their discourses and writings expounded and defended the traditional philosophy of the Schools in its application to practical issues. Chief among these were Père Lacordaire, O.P. (1802–1861), Père de Ravignan, S.J. (1795–1858), Frédéric Ozanam (1813–1853), Mgr. D'Hulst (1841–1896), and L'Abbé de Broglie (1834–1895).

Spain. In Spain¹ the succession of philosophical systems during the nineteenth century was almost identical with that which occurred in France. During the first years of the century, philosophical speculation in Spain reflected the sensism and empiricism of Condillac's school. Then came a reaction in favor of spiritualistic philosophy in the form of a modified traditionalism and ontologism.

The most distinguished name in the history of philosophic thought in modern Spain is that of Jaime Balmes (1810–1848), author of *Filosofía fundamental* and of *El Protestantismo comparado con el Catolicismo*. The basic principles of Balmes' philosophy are Thomistic; to these, however, he adds elements derived from Descartes, Leibniz, and the Scottish school. He restricts, for example, the region of *rational certitude* to subjective phenomena, maintaining that the certitude which we possess with reference to objective phenomena is instinctive and more akin to the certitude of faith than to scientific certitude. He departs also from the teachings of St. Thomas in rejecting the *active intellect* and the *intelligible species*. His discussion of the *criteria of truth*, to which he devoted a special treatise (*El Criterio*), is perhaps his most valuable contribution to philosophy. Exceedingly able, too, is his refutation of scepticism in the work entitled *Cartas á un escéptico*.

Juan Donoso Cortés (1809–1853), "the De Maistre of Spain," although not a professed philosopher of any school, contributed

¹ Cf. González, *op. cit.*, IV, 441 ff.

to the establishment of the spiritualistic philosophy by his profound philosophical reflections on the religious, political, and social topics of the day. His principal work is entitled *Ensayo sobre el Catolicismo, el liberalismo y el socialismo*.

England. In England the *Oxford movement*, which is the most striking illustration of the assertion of the principle of authority as opposed to individualism in matters of religious thought, gave to Catholic intellectual activity in that country a decidedly theological trend. **Cardinal Newman** (1801–1890) may be said to have formulated in his *Grammar of Assent* a theory of estimation of theological evidence. *The Metaphysics of the Schools*, by Father **Thomas Harper**, S.J., is an elaborate attempt at presenting Scholastic philosophy in a form accessible to English readers.

Italy. In Italy Catholic philosophy during the nineteenth century experienced a revival which, within the last twenty-five years, has spread its influence throughout the entire Church. During the reign of Pius IX, Fathers **Liberatore** (1810–1892), **Cornoldi** (1822–1892), and others contributed to the *Civiltà Cattolica* articles in which the principles of Rosmini's idealism were criticised and the traditional philosophy of the schools expounded and defended. To Father Cornoldi belongs the honor of having founded at Bologna, in 1874, the Philosophical Academy of St. Thomas of Aquin, which, until the year 1891, continued to publish *La Scienza Italiana*. Canon **Sanseverino** (1811–1865), author of *Philosophia Christiana cum Antiqua et Nova Comparata*, his pupil Canon **Signoriello** (1821–1889), author of a *Lexicon Peripateticum Philosophico-Theologicum*, and Mgr. **Talamo**, author of *l'Aristotelismo della Scolastica, etc.*, are to be mentioned among those who prepared the way for the Neo-Scholastic movement inaugurated at the beginning of the reign of Leo XIII.

Neo-Scholastic Movement. In the encyclical *Inscrutabili Dei Consilio* published in 1878, in the encyclical *Æterni Patris* (1879), in briefs relating to the foundation of the Roman Academy of St. Thomas (1879) and of the Institut Supérieur

de Philosophie at the University of Louvain (1894), and in many other documents, Leo XIII has encouraged and promoted the study of the great masters of Scholasticism, and in particular the study of St. Thomas of Aquin. In all these documents Pope Leo insists on: (1) the return to the study of the texts of the Scholastic writers of the thirteenth century: "Providete ut sapientia Thomæ ex ipsis ejus fontibus hauriatur"; (2) the exclusion of such problems as are more subtle than profitable, and the rejection of such doctrines of the schoolmen as have been proved to be false: "Si quid est a doctoribus Scholasticis vel nimia subtilitate quæsitum, vel parum considerate traditum, si quid cum exploratis posterioris ævi doctrinis minus cohærens . . . id nullo pacto in animo est ætati nostræ ad imitandum proponi"; and (3) the extension and completion of the Scholastic system: "Vetera novis augere et perficere." It is, therefore, in no spirit of indiscriminating devotion to the past, but rather in the spirit of thorough and scholarly appreciation of the past, that the representatives of Neo-Scholasticism have discarded as useless those *Compendia ad Mentem Divi Thomæ* in which Scholastic philosophy was watered down to the taste of the modern reader, and have gone back to the study of the texts of the masters.

Prominent among those who have contributed to the success of the Neo-Scholastic movement are Cardinals Pecci (1807-1890), Zigliara (1833-1893), and Satolli, Mgr. Lorenzelli,¹ the Jesuit Fathers De Maria and De Mandato, and the Dominican Father Lepidi.² In

¹ Cardinal Pecci, *De Ente et Essentia* (1882), etc.; Cardinal Zigliara, *Summa Philosophica* (3 vols., 1876, eighth edition, 1891), *Della luce intellettuale*, etc.; Cardinal Satolli, *Enchiridion Philosophiæ: Pars Prima Complectens Logicam Universam* (1884), *In Summam Theologicam Praelectiones: De Deo Uno* (1884), *De Operationibus Divinis* (1885), *De Gratia Christi* (1886), *De Trinitate* (1887), *De Incarnatione* (1888), *De Habitibus* (1897); Lorenzelli, *Philosophia Theoretica Institutiones* (2 vols., 1896).

² De Maria, *Philosophia Peripatetico-Scholastica* (3 vols., 1892); De Mandato, *Institutiones Philosophicæ* (1894); Lepidi, *Elementa Philosophiæ Christianæ* (1875 ff.).

Germany the movement was taken up by Father **Tilman Pesch** and the other Jesuit authors of the *Philosophia Lacensis*, while in France it has had many able representatives, among them the Sulpician, M. l'Abbé **Farges**.¹ The most notable English contribution to the Neo-Scholastic literature is the *Stonyhurst Series of Manuals of Catholic Philosophy*. Mention must also be made of the excellent publications of the Institut Supérieur de Philosophie of the University of Louvain, namely, the *Cours de Philosophie* by Mgr. **Mercier**, **M. De Wulf**, **D. Nys**, and others, and also of the periodicals *Divus Thomas*, *La Revue Thomiste*, and *La Revue Néo-Scholastique*.

CHAPTER LXXIII

CONTEMPORARY PHILOSOPHY

Germany. In Germany there seems to be at the present time a tendency towards *reconstruction on a realistic basis*. Darwin's *evolutionary hypothesis* and the *law of the conservation of energy*, which was formulated and proved by **Robert Mayer** (1814–1878), demanded a reconstruction of the philosophy of nature, and in answer to this demand there appeared various systems.

(a) *Materialism*, represented by **Karl Vogt** (1817–1895), author of *Vorlesungen über den Menschen*, etc. (1863), **Jakob Moleschott** (1822–1893), author of *Der Kreislauf des Lebens* (1852), **Ludwig Büchner**, author of *Kraft und Stoff* (1855), and **Ernst Haeckel**, author of *Natürliche Schöpfungsgeschichte* (1868), *Dje Welt-rätsel* (1899). With these is contrasted **Albert Lange** (1828–1875), the historian of materialism, who, while maintaining that materialism is indispensable as a method of investigation, teaches that it is untenable as a system.²

¹ *La vie et l'évolution des espèces* (1892), *Matière et forme* (1892), *Le cerveau, l'âme*, etc. (1892), *Théorie fondamentale de l'acte et de la puissance* (1893), *L'idée du continu dans l'espace et le temps* (1894), *L'idée de Dieu* (1894), etc.

² Falckenberg, *op. cit.*, p. 489 (English trans., p. 615).

(b) *Neo-Criticism*. The Neo-Critics, deploring the effects of the "deluge of romanticism," return to the principle of criticism, and in their idealistic reconstruction give fuller scope to the scientific view than their predecessors succeeded in doing. Chief among the Neo-Critics are **Rudolf Hermann Lotze** (1817–1881), author of *Metaphysik* (1840), *Medizinische Psychologie* (1852), *Mikrokosmos* (1856–1864), etc., and **Eugen Dühring**, author of *Natürliche Dialektik* (1865), etc. Lotze's philosophy may be said to combine Herbartian with Fichtean and Hegelian metaphysics. Dühring devotes special attention to epistemology, emphasizing the antithesis between the ideal continuity of thought and the fragmentary character of given empirical reality. The most enthusiastic of the Neo-Kantians is **Friedrich Paulsen**,¹ who defines philosophy as "the sum of all scientific knowledge." He is equally opposed to the intellectualism of Fichte, Schelling, and Hegel, who "absolutely ignore experience and pay it no regard whatever," and to the materialism of Vogt, Büchner, etc., who overlook the essential distinction between the psychical and the physical order of reality. He adopts a theory of metaphysical and psychological *parallelism* (*pan-psychism*), and insists, as Rousseau and Schopenhauer insisted, on the recognition of the demands of the heart and the supremacy of will over intellect.

In the philosophy of **Friedrich Adolf Trendelenburg** (1802–1872) the realistic reaction appears in the form of a *revived Aristotelianism*. His principal works are *Logische Untersuchungen* (1840), *Naturrecht auf dem Grunde der Ethik* (1860), and *Historische Beiträge zur Philosophie* (1846).

(c) *Specialization of Philosophy*. A third phase of the realistic reaction appears in the empirical philosophy, which, in obedience to the principle of the division of labor, is tending towards *specialization of philosophical inquiry*. Under this head may be included the physiologist, **E. H. Weber**; the psychologists

¹ Cf. *Introduction to Philosophy*, trans. by Thilly (New York, 1895).

Fechner and Wundt, founders of the science of psycho-physics,¹ Brentano, Stumpf; the educationalists and folk-psychologists, Steinthal, Lazarus; the logician Sigwart; the epistemologists, E. L. Fischer and Hermann Schwarz. To these may be added Tönnies, Döring, Ziegler, who devote special attention to ethical problems; Hermann, Karl Fischer, students of the philosophy of history; and Zeller, J. E. Erdmann, Kuno Fischer, Falckenberg, Windelband, Otto Willmann, and Clemens Baeumker, historians of philosophy.

Avenarius (1843–1896) represents the critical philosophy of experience (empirio-criticism).

France. In France the current of contemporary thought seems to have set towards a *neo-criticism*, which aims at *spiritualistic reconstruction*: "After passing," writes M. Fouillée, "through a period in which the intellect was in revolt against the heart, we are entering into one in which the heart is in revolt against the intellect."² Vacherot (1809–1897), author of *La métaphysique et la science* (1858), represents the form of idealism prevalent in France about the middle of the nineteenth century,—the reaction against positivism. More recently, Renouvier, Secrétan, Pilon, Boutroux, represent a critical philosophy,³ which is tending towards partial dogmatism (existence of the Infinite, freedom of the will, etc.).

Paul Janet (1823–1899), an eclectic spiritualist, represents the continuation of the philosophy of Cousin and Jouffroy, while Alfred Fouillée defends a system of monism based on the concept of *idées forces*,—a monism which combines the intellectualism of Hegel with the voluntarism of Schopenhauer.⁴

¹ Cf. Ribot, *Psychologie allemande contemporaine*, trans. by Baldwin (New York, 1886).

² *Revue des Deux Mondes*, mars 15, 1896.

³ Renouvier, *Essai de critique générale* (1854), *Science de la morale* (1869), *Principes de la nature* (1864), *Philosophie analytique de l'histoire* (1896–1897), etc.; Secrétan, *De la philosophie de Leibniz* (1840), *La philosophie de la liberté* (1849), *La raison et le christianisme* (1863), etc.; Pilon, *L'année philosophique* (first number, 1891); Boutroux, *Questions de morale et d'éducation* (1895), etc.

⁴ Janet, *Causes finales* (1876), etc.; Fouillée, *L'avenir de la métaphysique fondée sur l'expérience* (1889), *L'évolution des idées-forces* (1890), etc.

M. L'Abbé Plat, one of the most distinguished representatives of constructive spiritualism in France at the present time, expounds and defends the essential doctrines of Thomistic philosophy. He is to be reckoned among the most enlightened and successful of the Neo-Thomists.¹

Among the psychologists, **Ribot**, **Delbœuf**, **Paulhan**, represent a modified form of phenomenism, while **Bernheim**, **Charcot** (1825-1893), **Binet**, **Luys**, and **Pierre Janet** represent the French school of pathological psychology, and psycho-physics.²

The *socialism* of **Fourier** (1772-1837), **Proudhon** (1809-1865), etc., gave, towards the middle of the nineteenth century, an impetus to sociological inquiry which has produced the contemporary French school of sociology. The chief contributors to the literature of sociology are **M. Tarde** and **René Worms**.

England. In England the Neo-Hegelian movement has been gaining strength during the last quarter of a century. In addition to **J. H. Stirling**, **T. H. Green**, **John Caird**, **Edward Caird**,³ of whom mention has already been made, **William Wallace**, **F. H. Bradley**, **David G. Ritchie**, **Andrew Seth**, **John McTaggart**, and others exhibit different phases of contemporary interest in transcendental criticism and construction on an idealistic basis.⁴ "The springs of

¹ *L'intellect actif* (1891), *L'idée* (1896), *La liberté* (1894-1895), *Socrate* (1901), etc.

² **Ribot**, *L'hérédité* (1882), *La psychologie anglaise contemporaine* (1870), *La psychologie allemande contemporaine* (1879), *Maladies de la mémoire* (1881), etc.; **Delbœuf**, *Études psychologiques* (1873), *Théorie générale de la sensibilité* (1875), etc.; **Paulhan**, *La physiologie de l'esprit* (1888), *Les caractères* (1894), etc.; **Binet**, *Les altérations de la personnalité* (1892), and, in collaboration with **M. Féré**, *Le magnétisme animale* (troisième édition, 1890); **Luys**, *Le cerveau et ses fonctions* (1875); **Bernheim**, *La suggestion*, etc. (1884); **Charcot** (1825-1893), *Les démoniaques dans l'art* (1887); **Pierre Janet**, *L'automatisme psychologique* (1889).

³ **John Caird**, *An Introduction to the Philosophy of Religion* (1880), etc.; **Edward Caird**, *The Critical Philosophy of Immanuel Kant* (1889), etc.

⁴ **Wallace**, *Prolegomena to the Logic of Hegel* (second edition, 1894); **Bradley**, *Appearance and Reality* (1893); **Ritchie**, *Darwin and Hegel* (1893); **Andrew Seth**, *Hegelianism and Personality* (1887); **McTaggart**, *Studies in Hegelian Dialectic* (1898), *Hegelian Cosmology* (1901).

this movement," Professor Wallace observes, "lie in the natural and national revulsion of English habits of mind. Slowly, but at length, the storms of the great European revolution found their way to our intellectual world, and shook Church and State, society and literature. . . . The insularity which had secluded and narrowed the British mind since the middle of the eighteenth century needed something deeper and stronger than French 'ideology' to bring it abreast of the requirements of the age. Whatever may be the drawbacks of transcendentalism, they are virtues when set beside the vulgar ideals of enlightenment by superficialization."¹

Alexander Campbell Fraser,² in his *Philosophy of Theism*, advocates the necessity of philosophic faith. Arthur James Balfour, in his *Defence of Philosophic Doubt* (1879) and his *Foundations of Belief* (1895), opposes both realism and idealism and advocates the principle of authority.

In the special departments of philosophic study there have appeared in recent times the *logicians*, George Boole (1815-1864), W. Stanley Jevons (1835-1882), John Veitch, J. N. Keynes, Thomas Fowler; the *moral philosophers*, Henry Sidgwick³ (1838-1900), James Martineau (1805-1900), Henry Calderwood, Leslie Stephen; the *psychologists*, James Sully, C. Lloyd Morgan, and W. B. Carpenter (1813-1885); and the *pathologists*, Henry Maudsley, C. A. Mercier.

Italy. In Italy the official philosophy, whether Hegelian, positivistic, phenomenistic, or Rosminian, manifests a spirit of bitter *hostility towards religion* in the positive form of Catholicism. So far the Neo-Scholastic movement is apparently without influence on the centers of secular education.

Mention must here be made of the Italian school of *criminology* and *psychiatry* represented by Lombroso and Mantegazza.

¹ *Prolegomena to Hegel's Philosophy*, Preface, p. xi.

² *Philosophy of Theism* (First Series, 1895; Second Series, 1896), *Collected Works of Berkeley, Selections from Berkeley*, etc.

³ Cf. "On the Ethical Theory of Henry Sidgwick," *Mind*, April, 1901.

America. In America the Neo-Hegelian movement has found distinguished representatives in **John Watson** and **W. T. Harris**.¹ The future course of philosophic thought in this country is, however, likely to be influenced less by the Neo-Hegelians than by the *Neo-Voluntarists*, who teach that "the ultimate test for us of what a truth means is the conduct it dictates or inspires," and that "the whole function of philosophy ought to be to find out what definite difference it will make to you and me at definite instants of our lives if this world-formula or that world-formula be the one which is true." This *pragmatism* may be said to interpret the meaning of conceptions by asking what difference they make in the matter of life, conduct, and activity experience; for the Cartesian, "Cogito, ergo sum," it substitutes "Ago, ergo sum." It was first proposed as a maxim by **C. S. Peirce**.² Its chief representatives in this country are Professor **William James** of Harvard, and Professor **William Caldwell** ³ of Northwestern University. The latter contends that Professor James, while rightly appealing to pragmatism as a method, fails to carry the principle of voluntarism far enough. He suggests the adoption of a broader metaphysical principle, according to which reality should be defined as "that which sustains a more or less verifiable and determinable relation to our activity."

In connection with this neo-voluntarism, or "new ethical" movement, mention must be made of Professor **Josiah Royce** ⁴

¹ Watson, *Comte, Mill, and Spencer, an Outline of Philosophy* (Glasgow, 1895); Harris, *Hegel's Logic* (Chicago, 1890), etc.

² In *Popular Science Monthly* (January, 1878); cf. *Dictionary of Philosophy*, article, "Pragmatism"; *Mind* (October, 1900); *Phil. Review*, Sept. 1903, Jan. 1904.

³ James, *Principles of Psychology* (New York, 1893); *The Will to Believe*, etc. (1897), *The Varieties of Religious Experience* (1902), etc.; Caldwell, *Schopenhauer's System in its Philosophical Significance* (New York, 1896); cf. *International Journal of Ethics* (July, 1898); *Mind* (October, 1900).

⁴ *The Spirit of Modern Philosophy* (1893), *The Conception of God* (1897), *Studies of Good and Evil* (1898), *The Conception of Immortality* (1900), *The World and the Individual* (First Series, 1899; Second Series, 1901).

of Harvard, who declares that "philosophy turns altogether upon trying what our various fundamental ideas mean," defines the individual to be that which is the *object of exclusive interest*, and in general adopts some non-rational standard, such as concrete experience (loyalty, love, interest) rather than elements constitutive of abstract thought-value, as the ultimate test of philosophic truth. "To be means simply to express, to embody the complete internal meaning of a certain absolute system of ideas. . . . Our theory of the nature of Meaning is to be founded upon a definition in terms of Will and Purpose."¹

Mention must also be made of psychologists who, like Professor J. M. Baldwin² of Princeton, contend that all cognitive activity is at the same time emotional activity, and that intellectual development is a continual growth in motor accommodation and in practical inventiveness.³

In the writings of Professor John Dewey⁴ of the University of Chicago there is traceable the influence of the English Hegelians, especially that of Green. There is, however, a manifest tendency on the part of Dr. Dewey to modify the purely intellectual idealism of Green by recognizing the motor tendency of our ideas, and thus bringing idealism into closer relation to the determination of values. Professor Frank Thilly⁵ of the University of Missouri has done good service to philosophy in America by his translations and by his able presentation of ethical problems. In the published works of Professor G. T. Ladd⁶ the preponderant influence

¹ *The World and the Individual* (First Series, pp. 36, 37).

² *Mental Development*, etc. (New York, 1895), *Social and Ethical Interpretations*, etc. (New York, 1897), *Fragments in Philosophy and Science* (1902); cf. especially, *Social and Ethical Interpretations*, pp. 248 and 295.

³ Cf. *New World* (September, 1898), VII, 504 ff.

⁴ *Psychology* (1886), *Outlines of Ethics* (1891), etc. Cf. *Psychol. Bull.*, January 15, 1904.

⁵ *Introduction to Ethics* (New York, 1900); translations of Weber's *History of Philosophy* (New York, 1896), Paulsen's *Introduction to Philosophy* (New York, 1895), Paulsen's *System of Ethics* (New York, 1899).

⁶ *Physiological Psychology* (1887), *Introduction to Philosophy* (1891), *Philosophy of Mind* (1895), *Philosophy of Knowledge* (1897), *A Theory of Reality* (1899), etc.

seems to be that of Lotze. Indeed, between Lotze's treatment of the problem of values and the contemporary pragmatic notion of philosophical method there exists a similarity which is suggestive of causal dependence. For, just as in Lotze's teleological idealism, reality is referred not to a purely rational category but to *worth* or *value*, which is determined by the *purpose* of life, so also in the pragmatism with which so much of recent philosophical literature is imbued, "The *ultima ratio* of every creed, the *ultima ratio* of truth itself, is that it works."¹

Retrospect. When contrasted with the philosophy of the eighteenth century, the philosophy of the nineteenth century exhibits, in the first place, a spirit of constructive activity. The eighteenth century was largely destructive in its aim and tendency; the age of illumination, which terminated that century, drew a line of separation between the intellectual and the spiritual, between the scientific and the religio-æsthetic, between culture and belief, and placed the individual in sharp antithesis to the social order. It treated with levity, and often with contempt, every effort to harmonize these elements into a constructive system of thought. The nineteenth century, however, changed all this. Thoroughly in earnest with theism and the problems of theistic philosophy, it attempted to combine into a synthetic system the spiritual, the religious, and the æsthetic elements of human life, as well as the intellectual and scientific. It studied the relation between the individual and society from the point of view of organic unity and dependence, rather than from that of mechanical independence and natural conflict. Not that philosophy in the nineteenth century succeeded in effecting a complete and systematic unification of these various elements. The century which has just come to a close was happily alive to the importance and value of constructive effort; but it was unfortunately condemned to start its construction on the foundation which a previous age had

¹ Andrew Seth, *Man's Place in the Cosmos*, p. 307.

laid. If, therefore, at the beginning of the twentieth century, a final philosophy seems as far from being attained as it seemed a hundred years ago, it is not because men have not striven, for they have striven earnestly, to find the true solution of the problems of philosophy; nor is it because they have neglected what their predecessors had too often underestimated, but because they could not break altogether with the past — with the subjectivism, the psychological dualism, and the false sense of philosophic method which they had inherited from Descartes.

Indeed, post-Kantian philosophy, the philosophy of the nineteenth century, exhibits in a high degree the *subjectivism* which is a characteristic of modern life. It is true that this trait is not always, and in all its aspects, a defect. For instance, while, as is well known, the beautiful and the spiritual in their objective phases played a far more important part in Greek life and in mediæval life than they play in modern life, yet it is the modern world that, owing to its clearer consciousness of inner experience, first undertook to analyze the sentiment of the beautiful and the religious sentiment. The subjectivism of modern philosophy appears, too, in its fuller realization of the difficulty of the philosopher's task. No doubt the work of unifying all knowledge and formulating a rational explanation of the complex world revealed by modern science, is far more imposing than the problem which confronted Thales; but when due allowance is made for the greater complexity of the problems which confront modern philosophy, must it not be charged to the too great subjectivism of our age that while it has felt more intensely, thought more profoundly, and analyzed more acutely, it has accomplished less than any preceding age? As in the individual, so also in the race; too much questioning and too little active responsibility and practical realization of the problems of life lead inevitably to the despair of knowing anything. Must an era of reflection be an era of irresolution and hesitancy? The neo-voluntaristic movement of the present

hour may be taken as an indication of the incompetency of "mere intellect" to explain all reality, and the importance which is at the present time attached to philosophic faith may be regarded as an assertion of the limitations of the analytic faculty and an affirmation of the need of constructive synthesis. Both these contemporary tendencies of thought may well meet in a common endeavor to restore a method which, uniting the objective with the subjective and making the supernatural continuous with the natural, would give free scope to reason within the limits of rational inquiry and leave at the same time ample room for the exercise of religious faith.

CHAPTER LXXIV

CONCLUSION

We have traced the origin and growth of philosophical opinions, outlined the development of schools and systems of philosophy, and indicated what seemed in each case to be an advance in or a retrogression of philosophic thought. There remains the task of inquiring into the general laws in obedience to which philosophy took in the course of its development the particular direction which it has taken.

That at one time rather than at another, in one place rather than in another, men should appear whose lives and thoughts had a decisive influence on the course of the development of philosophy, that countless factors, hereditary, temperamental, educational, and so forth, should result in determining the philosophical career of such men, — these are phenomena the origin of which lies beyond the scope of the philosophy of history; they are *data*, which must be considered as given by experience, in much the same way as the innate tendency to vary is taken as a *datum* by the biologist, who restricts his investigation to answering the question, How is this tendency affected by

environment? The task of the philosophy of history is merely to inquire how such data were influenced by social, political, religious, and other influences. Starting, therefore, with the unexplained appearance of Plato, Aristotle, St. Augustine, St. Thomas, Descartes, Spinoza, how may we formulate the laws according to which these and other contributors to the development of philosophic thought were influenced by the internal and external conditions which, combined with the personal factor commonly called genius, produced the changes and vicissitudes of the history of philosophy?

The laws of historical development are *a posteriori* laws. They are not to be deduced from *a priori* principles, but built up by a process of inductive reasoning from the study of the facts of history. This does not mean that history is the resultant of forces acting capriciously, but that the forces which produce historical development — being dependent on physical conditions, mental temperament, and the action and interaction of social institutions, customs, and organizations — are contingent, not necessary causes; that consequently the philosophy of history is not a geometry of the evolution and play of such forces; and that the laws which it seeks to establish are not deductions from definitions and axioms, but generalizations, similar to the *post facta* generalizations of the statistician. Divine Providence and human reason are the two great factors which determine the course of history. Sometimes these two work in unison, sometimes they clash; and the result is progress or deterioration. Wars, revolutions, conquests, educational reforms, industrial reconstructions, are all the work of man's mind, directed but not coerced by Divine Providence. Now, Divine Providence works through secondary causes, and will, which is the motive power of mind, though free, is not capricious, but follows certain ascertainable laws in its efforts to advance to a higher social state. The ground of historical development is, therefore, reason; not pure reason deducing

events as the logical mind deduces categories, but reason rendered contingent by freedom, and always subject to the unreasoning opposition of passion and impulse. Consequently, the laws of historical development are not *a priori* principles, as they should be if the ground of history were pure reason, nor are they mere aggregations of facts, as they should be if the ground of history were blind force. They are *a posteriori* inductions, based on observations, neither purely logical nor biological, but psychological.

The laws of historical development are *organic* laws; that is to say, they deal with vital phenomena. Now, organic laws differ from mechanical laws in this, that, while the latter may be expressed with quantitative accuracy, the former can lay claim to qualitative definiteness merely. In physics, chemistry, astronomy, and geology, the amount of force expended can be calculated and expressed in terms of some unit of measurement, and the verification of the laws of these sciences includes the establishment of a quantitative equivalence between the force expended and the work accomplished. But when once we cross the threshold of the biological sciences we must be content with the formulation of laws which are definite in every respect save that of quantity.¹ When, therefore, the laws of historical development formulate the relations between cause and effect they do not pretend to specify the definite amount of action and reaction.

Another peculiarity of the laws of historical development results from what is commonly called the *continuity of history*. This is based on a quality common to all manifestations of vital activity, namely, the absolute indelibility of an effect once produced on the living organism. "It is the peculiarity of living things," writes Clifford, "not merely that they change under the influence of surrounding circumstances, but that any change which takes place in them is not lost but retained, and, as it

¹ Cf. Balfour Stewart, *The Conservation of Energy* (New York, 1893), p. 159.

were, built into the organism to serve as the foundation for future actions. If you cause any distortion in the growth of a tree and make it crooked, whatever you may do afterwards to make the tree straight, the mark of your distortion is there; it is absolutely indelible; it has become part of the tree's nature. . . . No one can tell by examining a piece of gold how often it has been melted and cooled in geologic ages, by changes of the earth's crust, or even in the last year by the hand of man. Any one who cuts down an oak can tell by the rings in its trunk how many times winter has frozen it into widowhood, and summer has warmed it into life. A living being must always contain within itself the history not merely of its own existence but of all its ancestors."¹ This peculiarity of living organisms, which may be likened to the *vis inertiae* of physical force, appears in aggregate life as the continuity of history, and conditions the development of philosophy as well as that of every other vital product.

The *philosophy of the history of philosophy* is, therefore, the study of the organic laws in obedience to which philosophy took the particular course which it did take in its historical development. Some of these laws we have already observed as occasion offered; we have observed, for example, that a period of national enthusiasm and national prosperity is usually one of great activity, and in particular of great constructive activity, in philosophy; we have observed that the era of introspective philosophy corresponds with the period of mental maturity of a nation. Similarly, laws may be formulated expressive of the influence which climate, racial characteristics, literature, art, religion, etc., exercise on philosophy. Or, again, laws may be formulated in reference to conditions which are internal to philosophy itself, as for example that psychology is first dogmatic and afterwards critical, or that a system of ethics is determined by the psychology of the author or the school. We are not,

¹ *Lectures and Essays* (London, 1886), p. 54.

however, concerned here with such particular laws, but rather with the general formula under which all the particular laws, external and internal, of the history of philosophy may be subsumed.

Such a general formula is *development*. In the course of its history, philosophy has passed from a relatively simple to a relatively complex condition, from a homogeneous to a heterogeneous state, from indeterminateness to determinateness. But what are the characters of this development? A glance at the succession of philosophical systems will convince us that the evolution of philosophy *has not followed "an increasing purpose"*; philosophy has not always and everywhere passed from less to greater perfection; it has not gathered momentum as it came down the ages; truth has not come down to us gaining power and volume in its course, like the avalanche in its descent from the mountain top. If philosophy were the gradual unfolding of an idea, if that idea were the only reality, and if its evolution were consequently monistic, the progress of philosophy should have been "a triumphal march from victory to victory, through province after province of newly acquired truth, without a single reverse, without ever retreating from territory once fairly won." Such, we know, has not been the history of the philosophical sciences: the development of philosophy has followed a more complicated course than that of continued increase in perfection.

Comte, it will be remembered, distinguished three stages in the development of human thought; namely, the *theological*, the *metaphysical*, and the *positive*, or scientific. This generalization is one-sided; it judges all thought from the view point of positivistic prepossessions. Besides, it is inaccurate; for there have been alternations of the metaphysical and the scientific periods in philosophy. The age of Plato was metaphysical, that of Archimedes, Euclid, and Ptolemy was scientific; the thirteenth century returned to metaphysics, the sixteenth was preëminently a scientific century, while the nineteenth went back to metaphysics

in the form of transcendentalism. Still less accurate is Cousin's generalization, according to which philosophy has passed successively through the stages of *sensism*, *idealism*, *scepticism*, *mysticism*, and *eclecticism*. According to Hegel, philosophy has, in the course of its development, assumed different forms, each of which it successively transcends, thus gaining a fuller, richer, and more concrete content, so that the progress of philosophy corresponds to the development of the logical categories, *Being* (Eleatics), *Becoming* (Heraclitus), *Individuality* (Atomists), etc. No one will, however, maintain that Hegel's generalization meets with more than an approximate verification from the study of the facts of history.

We shall be content here with describing the development of philosophy in general terms as a *process of alternate progress and retrogression*,—a vast connected growth from lower to higher, with alternating periods of stagnation or degeneracy. This alternation of progress and retrogression is a characteristic of all development. Even in the evolutionary hypothesis the survival of the fittest does not necessarily mean the survival of the best. Indeed, rhythm is a quality of all motion whatsoever: in the physical, in the physiological, in the psychological, as well as in the social order, progress is essentially conditioned by periodicity. As in the individual life, so in the aggregate life, there is a fluctuation of vitality, a rise and fall. The line which represents human progress in industry, in art, in literature, and in philosophy is not an ascending vertical, nor a straight line ascending obliquely from the horizontal, but an undulating curve, like the record of the pulsation, now rising above the horizontal, now falling below it, representing at different points the same height of perfection or the same depth of degeneracy, but never representing exactly the same condition of human progress. The motion of the rowboat floating with the tide, rising and falling with each successive wave, yet constantly moving forward, so that while it often rises to the same height, it never rises

twice to the same point of space, is an image of the progress of human thought, human customs, and even human fashions, which are constantly changing and constantly returning to previous conditions, without ever completing the circle of regression. The continuity of life demands that each successive moment in life recapitulate the entire past. *Eadem sed aliter!*

If we are to reduce to general terms the forces which combine to cause this progress and retrogression of philosophic thought, we shall find that on the side of progress are the power of Him Who wishes all men to come to a knowledge of the truth, the attractiveness of truth itself, the impetus given to philosophic speculation by a Plato, an Aristotle, an Aquinas, and the enthusiasm of their followers; while opposed to progress are the necessity of daily toil, the commercial spirit, greed, unworthy ambition, war, cruelty, despotism, superstition, conservatism, fanaticism, love of novelty, loyalty to tradition, and intellectual sloth. Through these agencies does Divine Providence work out its designs, by these conditions is human reason aided or hindered in its effort to arrive at a knowledge of the ultimate nature of things, and by these factors are the rise and fall of philosophy determined. From Thales to Aristotle there is one great wave of progress which, though ruffled by petty wavelets of less successful movements, moves onward until, contemporaneously with the downfall of Greece's political independence, it begins to sink to the calm level of indifference to speculative effort. The wave of progress next appears in the doctrines of the Alexandrian school; it differs in aspect from the wave which preceded it,—is less compact in form and more easily broken. In the early centuries of the Christian era the philosophical movement gathers strength once more, and rises to its greatest height in the thirteenth century, after which conservatism, indifference, and sloth play the part of retrograding forces, until with the opening of the modern era another movement begins. This movement has continued with alternating rise

and fall until our own day. It has risen at those points where men like Descartes, Spinoza, Leibniz, Kant, and Hegel have appeared; it has fallen wherever adverse influences have predominated; but never has it risen to the altitude attained by that wave of human thought whose crest touched heaven itself, when reason and faith were united in one system of knowledge. Whither will this movement bear us? It will carry us forward, — we cannot resist the progress of historical development, — but will it raise us to a height as great as that to which the past attained? All will depend on the principles on which philosophical speculation in the future will rest.

It has been well said that a cripple on the right road will reach his destination sooner than the swiftest runner who has started in the wrong direction. Philosophy to-day realizes more than ever the importance of a right start and a correct method. If, therefore, much of recent speculation has made a wrong start, the sooner we return to the principles of former and more successfully constructed systems, principles often harshly expressed, yet plainly pointing towards the truth, the sooner will a genuine reform of philosophic method be possible. The fullest appreciation of the past is compatible with the most complete originality. To modern philosophers the challenge has ere now been addressed: "Ye have removed our landmarks; give us others that are better. . . . Ye have taken away our foothold; what have ye surer and safer in its place?" The present has much to learn from the past. If it is vain to strive to stem the progress of the world, it is equally vain to neglect the study of the past and to spend one's time in gloomily forecasting the future. The principles which the past has bequeathed to us should be adapted to the requirements of the future, and the motto by which all enlightened advancement should be guided is, *Vetera novis augere et perficere*.

INDEX

Numbers printed in black indicate the important places in which authors or subjects are treated; n. stands for footnote. Mediæval writers are indexed under their Christian names.

- Abelard, 272, 280, **285** ff., 319.
- Absolutism, political, of Hobbes, 444;
of Plato, 116.
- Abubacer, 312.
- Academies, Platonic, **121** ff., 185.
- Accadian traditions, 8.
- Achard of St. Victor, 305.
- Achillini, 427.
- Adelard of Bath, **283** ff., 320.
- Ægidius, *see* Giles.
- Ænesidemus, 184, 185 ff.
- Æsthetics, Aristotle's, 156; Hegel's,
580; Kant's, 544 ff.; Plato's, 118.
- Agnosticism, 73, 350, 601, **620**, 622.
- Agrippa, 186.
- d'Ailly, *see* Peter d'Ailly.
- Air currents, Stoic doctrine of, 167.
- Alanus ab Insulis, 301, 302.
- Albert the Great, 308, 324, **330** ff., 344,
345, 392.
- Albert of Saxony, 409.
- Alcuin, 241, **244**.
- Alemanni, 638.
- d'Alembert, 503.
- Alexander of Alessandria, 392.
- Alexander of Aphrodisias, **159**, 188.
- Alexander of Hales, 323, 324, **326** ff.,
331.
- Alexander Neckam, 324.
- Alexandrian philosophy, 198 ff.
- Alfarabi, 312.
- Alfred de Morlay, 320.
- Alfred Sereshel, 324.
- Algazel, 312.
- Alkendi, 312.
- Althus, 445.
- Amalfinius, 175.
- Amalric of Bène, 306, 307.
- Amaury, *see* Amalric.
- Ambrose, St., 224.
- Ammonius Saccas, 205.
- Anaxagoras, 52, 53, **61** ff., 82.
- Anaximander, **35**, 62.
- Anaximenes, 37.
- Andronicus of Rhodes, 128, **159**, 188.
- Angiulli, 633.
- Anna Comnena, 310.
- Anselm, St., 271, **272** ff., 539.
- Antinomies, Kant's, 538; Spencer's,
622; Zeno's, 49 ff.
- Antiochus of Ascalon, **124**, 188.
- Antipater, 164.
- Antisthenes, **87**, 92.
- Antonius Andrea, 392.
- Apollodorus, 175.
- Apollonius of Tyana, 204.
- Aquinas, *see* Thomas of Aquin, St.
- Arabian philosophy, 311 ff.
- Arcesilaus, **123**, 185.
- Archelaus, 64.
- Archimedes, 189.
- Archytas, 39.
- Ardigò, 633.
- Arete, 89.

- Arethas, 310.
 Arianism, 222.
 Aristarchus, 189.
 Aristippus, 89, 92.
 Aristippus the Younger, 89.
 Aristobulus, 200.
 Aristocles, 159.
 Aristotle, 34, 35, 36, 39, 41, 42, 43, 45, 48, 50, 52, 54, 57, 59, 61, 66, 68, 76, 81, 84, 101, 106, 107, 114, 124 ff., 243, 309, 322, 418, 532, 567, 645.
 Aristotle and the Christian Church, 320 f.
 Aristotle's works, translations of, 320 ff.
 Aristoxenus, 159.
 Arnauld, 462.
 Arnobius, 220.
 Arrian, 194.
 Asclepiades, 188.
 Astronomy, among the Accadians, 8; among the Greeks, 42, 109, 189; mediæval, 371; modern, 432.
 Athanasius, St., 222.
 Athenagoras, 220.
 Atomists, the, 52, 53, 65 ff.
 Augustine, St., 3 n., 102, 224 ff., 278, 281, 450.
 Augustinianism in Scholastic philosophy, 278, 325, 329, 386.
 Aureolus, *see* Peter Aureolus.
 Auxerre, school of, 261 ff.
 Avempace, 312.
 Avenarius, 646.
 Averroës, 313 ff.
 Averroism, 393, 415, 427.
 Avicbrol, 315 f., 389.
 Avicenna, 312 f.
 Baader, 560, 639.
 Bacon, Francis, 435 ff., 460.
 Bacon, Roger, *see* Roger Bacon.
 Bâdarâyana, 19.
 Baer, Von, 619.
 Baumker, 646.
 Bain, 618.
 Baldwin, 650.
 Balfour, 648.
 Balmes, 641.
 Bafiez, 424.
 Bartholomew the Englishman, 329 n.
 Basil, St., 222.
 Basilides the Epicurean, 175.
 Basilides the Gnostic, 218.
 Bastiat, 612.
 Bauer, 583.
 Bautain, 606.
 Bayle, 511.
 Beattie, 594.
 Beck, 549.
 Bede, Venerable, 235, 246.
 Beneke, 584.
 Bentham, 614, 618, 626.
 Berengar, 247, 271.
 Berkeley, 446, 495, 513 ff.
 Bernard of Chartres, 292 ff.
 Bernard of Clairvaux, St., 286, 289, 297, 302, 332.
 Bernard of Hotun, 382.
 Bernard of Tours, 306.
 Bernardus Silvester, *see* Bernard of Tours.
 Bernheim, 647.
 Bernier of Nivelles, 393.
 Bessarion, 427.
 Biel, 409.
 Binet, 647.
 Biran, *see* Maine de Biran.
 Bodin, 442.
 Boethius, 235.
 Boetius the Dacian, 393.
 Böhme, 414, 439 ff., 556, 559.
 Bolingbroke, 495.
 de Bonald, 603 f.
 Bonaventure, St., 323, 329 ff., 392.
 Bonnet, 502.
 Bonnetty, 606.
 Boole, 648.
 Bosanquet, 4 n.

- Boscovich, 638.
 Bossuet, 462.
 Boutroux, 646.
 Boyle, 432.
 Bradley, 647.
 Bradwardine, *see* Thomas Bradwardine.
 Brahe, 432.
 Brentano, 646.
 de Broglie, 641.
 Brown, Thomas, 595 f.
 Brownson, 636 f.
 Bruno, 429, 430, 467, 556.
 Büchner, 644.
 Buddhism, 25 f., 590.
 Buffon, 619.
 Buridan, *see* John Buridan.
 Burleigh, *see* Walter Burleigh.
 Butler, 495, 499.
 Byzantine philosophy, 310 f.
- Cabala, 315, 395.
 Cabanis, 503, 588, 602.
 Caird, E., 628, 647.
 Caird, J., 628, 647.
 Cajetan, *see* Thomas de Vio Cajetan.
 Calderwood, 648.
 Caldwell, 649.
 Calvin, 439.
 Campanella, 430 f.
 Campbell, 495.
 Cano, Melchior, 424.
 Capreolus, *see* John Capreolus.
 Caramuel, 638.
 Cardano, 428.
 Carlyle, 628.
 Carmichael, 592.
 Carneades, 123, 185.
 Carolingian schools, 241 f.
 Carpenter, 648.
 Carpocrates, 218.
 Cartesian school, 462 ff.
 Carus, 560.
 Cassiodorus, 235.
 Categories, Aristotle's, 130; Hegel's, 566 ff.; Kant's, 532 ff.; Mill's, 616; the Stoics', 166 f.
 Cause, Ænesidemus' doctrine of, 186; Aristotle's doctrine of, 137 ff.; Hamilton's doctrine of, 600; Hegel's doctrine of, 569; Hume's doctrine of, 521 ff.; Kant's doctrine of, 530; Locke's doctrine of, 490; the Occasionalists' doctrine of, 463 ff.
 Celsus the Platonist, 205.
 Celsus the Sextian, 193.
 Cerinthus, 218.
 Chaldeans, astrology of, 8.
 Channing, 635.
 Charcot, 647.
 Charron, 427.
 Chartres, school of, 292 ff.
 Chinese philosophy, 12 ff.
 Christianity, and philosophy, 215; and Stoicism, 171, 173 n.; deistic conception of, 494.
 Chrysippus, 164.
 Chubb, 495.
 Church, and philosophy, 215 ff.; attitude of, towards Aristotle, 320 f.; towards scientific discoveries, 433; towards Scholastic revival, 642 f.; towards traditionalism, 606.
 Cicero, 35, 67, 79, 90, 97, 190 ff.
 Clarke, 495.
 Claudianus Mamertus, 235.
 Cleanthes, 163.
 Clement of Alexandria, 221.
 Clement of Ireland, 241.
 Clifford, 620.
 Coleridge, 628.
 Collins, 495.
 Common sense, philosophy of, 593 ff.
 Communism, 612.
 Complutenses, 638 n.
 Comte, 608 ff., 621.
 Conceptualism, 266, 288, 405.
 Condillac, 501.

- Confucius, 13.
 Conimbricenses, 638 n.
 Conscience, Abelard's doctrine of, 291;
 Butler's doctrine of, 499.
 Conservation of energy, 644.
 Constantine the African, 295, 320.
 Copernicus, 432.
 Cornoldi, 642.
 Cornutus, 164, 193.
 Cortés, 641 f.
 Cosmological argument, Kant's criticism of, 539.
 Cousin, 607 f., 646.
 Crantor, 123.
 Crates, 87, 123.
 Cratylus, 70.
 Criticism, transcendental, 529 f.; rôle of, in philosophy, 548.
 Cudworth, 496.
 Cusa, *see* Nikolaus of Cusa.
 Cuvier, 619.
 Cynics, 87 ff., 92.
 Cyrenaics, 89 ff., 92.
 Cyril of Alexandria, 223.
 Damascius, 211.
 Dante, 383, 384, 441.
 Darwin, Charles, 619 ff.
 Darwin, Erasmus, 595, 614.
 David the Armenian, 311.
 David of Dinant, 307 ff.
 Deism, 494.
 Delbœuf, 647.
 De Mandato, 643.
 De Maria, 643.
 Demetrius, 188.
 Demetrius of Phalerus, 159.
 Democritus, 52, 65, 178.
 Demonax, 188.
 Denis the Carthusian, 413.
 Descartes, 146, 447 ff., 467, 526, 537, 539, 606, 652.
 Determinism, psychological, 171, 430, 481; theological, 416.
 Dewey, 650.
 Dialectic, Aristotle's, 130; Hegel's, 564; Kant's, 536; Plato's, 98; the Sophists', 71 ff.; Zeno's, 49.
 Diderot, 503.
 Diogenes of Apollonia, 64.
 Diogenes Laertius, 53 n., 91.
 Diogenes of Seleucia, 164.
 Diogenes of Sinope, 87.
 Dionysius the Areopagite, 223.
 Dionysius the Epicurean, 175.
 Dominic of Flanders, 409.
 Dominic de Soto, 424.
 Dominican school, 323, 343.
 Dominicus Gundisalvi, 320.
 Döring, 646.
 Dühring, 645.
 Dungal, 242.
 Duns Scotus, *see* John Duns Scotus.
 Durandus, *see* William Durandus.
 Dwight, 635.
 Eberhard, 548.
 Eckhart, 4 3, 414.
 Eclecticism, French, 607; Greek, 187 ff.; mediæval, 299 ff.; Roman, 189 ff.
 Edwards, Jonathan, 634.
 Egypt, ancient religion of, 9.
 Egyptian doctrine of immortality, 10.
 Elean school, 86.
 Eleatic school, 44 ff., 99, 102, 103, 584.
 Elements, doctrine of, Aristotle's, 145; Empedocles', 59.
 Emanation, doctrine of, Erigena's, 252 f.; Neo-Platonic, 206, 210.
 Emerson, 635.
 Emotions, concept of, Descartes', 458; Spinoza's, 479; the Stoics', 172; St. Thomas' 367.
 Empedocles, 58, 62, 64, 109.
 Empiricism, 486 ff., 500 ff., 630.
 Empirio-criticism, 646.
 Encyclopædists, 503.

- Enfantin, 612.
 Enlightenment, English, 494; French, 500 ff.; German, 524 f.
 Epictetus, 164, 194.
 Epicurean school, 175 ff.
 Epicurus, 175.
 Epistemology, Aristotle's, 132 ff.; St. Augustine's, 226 ff.; Descartes', 454 f.; Kant's, 540; Leibniz', 510 f.; Plato's, 98 ff.; Socrates', 81; Spenser's, 626; St. Thomas', 354 ff.
 Erasmus, 438.
 Erdmann, J. E., 583, 646.
 Eretrian school, 87.
 Eric of Auxerre, 242, 261 ff.
 Erigena, *see* John Scotus Erigena.
 Euclid the geometrician, 189.
 Euclid of Megara, 85.
 Eudæmonism, in Greek philosophy, 83; opposed by Kant, 542.
 Eudemus of Rhodes, 158.
 Eudorus, 188, 205.
 Evolution, 618 ff.
 Experiment, Bacon insists on, 437.
 Fabianus, 193.
 Faith and reason, Abelard's reconciliation of, 289; St. Anselm's, 273; Erigena's, 247 f.; St. Thomas', 348 ff.
 Falckenberg, 646.
 Farges, 644.
 Fechner, 646.
 Fénelon, 462.
 Ferrari, 633.
 Ferrariensis, *see* Francis a Sylvestris.
 Ferri, 633.
 Ferrier, 601.
 Feuerbach, 583.
 Fichte, 550 ff., 556, 562.
 Ficino, 427.
 Figulus, 204.
 Fischer, Karl, 646.
 Fischer, Kuno, 646.
 Fiske, 637.
 Florus, 247.
 Fludd, 427.
 Form, Aristotle's doctrine of, 138 f.
 Forms, *a priori*, Kant's doctrine of, 532 ff.
 Fortlage, 584.
 Fouillée, 646.
 Fourier, 647.
 Fowler, 648.
 Franchi, Ausonio, 633.
 Francis of Mayron, 392.
 Francis a Sylvestris, 424.
 Franciscan school, 323, 326.
 Franck, 414, 439.
 Franklin, Benjamin, 635.
 Fraser, 648.
 Frassen, 638.
 Fredegis, 244.
 Freethinkers, 494 ff.
 Fries, 583 f.
 Frohschammer, 639.
 Fulbert of Chartres, 271.
 Galen, 159, 188.
 Galileo, 432.
 Galuppi, 630.
 Gassendi, 427, 450.
 Gaunilo, 275.
 Gentili, 445.
 George Pachymeres, 310.
 George of Trebizond, 427.
 Gerard of Abbeville, 382.
 Gerard of Bologna, 392.
 Gerard of Cremona, 299 n., 320.
 Gerbert, 257 ff.
 Gerbet, 606.
 Gerdil, 638.
 Gerson, 307, 412.
 Geulincx, 463 f.
 Gilbert de la Porrée, 296 ff.
 Giles of Rome, 382.
 Gioberti, 633.
 Gioja, 630.
 Gnostics, 218 f.

- Godfrey of Fontaines, 382.
 Godfrey of St. Victor, 305.
 Görres, 640.
 Göschel, 583.
 Good, idea of, identified with God, 105,
 115.
 Gotama, 23.
 Gottschalk, 247.
 Goudin, 638.
 Gratry, 606.
 Green, 628 f., 647.
 Gregory Nazianzen, St., 222.
 Gregory of Nyssa, St., 222.
 Gregory of Rimini, 408.
 Groot, Gerhard, 411.
 Grotius, 445.
 Guerinois, 638.
 Guido of Medonta, 413.
 Günther, 640.

 Haeckel, 644.
 Hamann, 548.
 • Hamilton, 596 ff., 621.
 Hardenberg, *see* Novalis.
 Harmony, Heraclitean doctrine of, 56;
 Pythagorean doctrine of, 41.
 Harper, 642.
 Harris, 649.
 Hartley, 595, 613.
 Hartmann, 591 f.
 Harvey, 457 n.
 Hauréau, 240.
 Hedonism, of Aristippus, 90; of Ben-
 tham, 614; of Epicurus, 180 ff.; of
 Mill, 617 f.; of Spencer, 626 f.
 Hegel, 2, 555, 560 ff., 586, 591, 634, 646,
 658.
 Hegelian school, 583.
 Hegesias, 91.
 Heliocentric system, among the Greeks,
 189; in modern times, 432.
 Helmont, Van, 427.
 Helvétius, 502.
 Henry of Brabant, 320.
 Henry of Ghent, 382, 384 ff.
 Heraclides of Pontus, 123.
 Heraclitus, 38, 52, 53 ff., 69, 70, 99.
 Heraclitus the Stoic, 163.
 Herbart, 584 f.
 Herbert of Cherbury, Lord, 494.
 Herder, 525, 548, 618.
 Heredity, a factor in genesis of knowl-
 edge, 625.
 Herman of Dalmatia, 320.
 Herman the German, 320.
 Hermann, 646.
 Hermarchus, 175.
 Hermes Trismegistus, 205.
 Hermes, Georg, 639 f.
 Hervé of Nedellec, 356, 383.
 Hesiod, 31, 54.
 Hesiodic cosmogony, 31.
 Heuristic method, 80 f.
 Hicetas, 189.
 Hickok, 637.
 Hilary, St., 224.
 Hildebert of Lavardin, 282.
 Hincmar, 247.
 Hippias, 71, 73.
 Hippolytus, 46, 220.
 Hobbes, 443 ff.
 Holbach, 503.
 Homeric poems, 31.
 Honain ben Isaac, 311.
 Hugh of St. Victor, 303.
 d'Hulst, 641.
 Humanists, 425 ff.
 —Hume, 446, 490, 518 ff., 529, 592. —
 Hutcheson, 498 f., 592.
 Huxley, 620.
 Hylozoism of Earlier Ionians, 38.
 Hypatia, 211.

 Iamblichus, 42, 209.
 Ideas, Platonic theory of, 99 ff.; Aris-
 totle's criticism of Platonic theory of,
 135 f.; Schopenhauer's theory of,
 586.

- Immortality of the soul, Aristotle's doctrine of, 152; Averroës' doctrine of, 314; Egyptian doctrine of, 10; Epicurean doctrine of, 180; Hindu doctrine of, 18; Hume's doctrine of, 521; Leibniz' doctrine of, 511; Ockam's doctrine of, 406 f.; Plato's doctrine of, 110 ff.; Spinoza's doctrine of, 482 ff.; the Stoics' doctrine of, 170; St. Thomas' doctrine of, 360 ff.
- India, religious philosophy of, 15 ff.
- Industrialism, 612, 626.
- Ionian school, 33 ff.; Earlier Ionians, 34 ff.; Later Ionians, 53 ff.
- Irenæus, St., 220.
- Irony, Socratic, 80.
- Isidore of Seville, St., 235, 246.
- Jacobi, 548.
- Jainism, 26.
- James, 649.
- Janet, Paul, 646.
- Janet, Pierre, 647.
- Jerome, St., 224.
- Jesuit school, 424 f.
- Jevons, 648.
- Jewish philosophy, 315 ff.
- Joachim de Floris, 307.
- Johannes Anglicus, 425.
- Johannes Hispanus, *see* John Avendeath.
- Johannes Italus, 310.
- Johannes Magistri, 425.
- Johannes Sophista, 268.
- John Avendeath, 320.
- John Buridan, 408 f.
- John Capreolus, 392.
- John Damascene, St., 223 ff.
- John de la Rochelle, 324, 329.
- John de Mirecourt, 413.
- John Dumbleton, 392.
- John Duns Scotus, 387 ff., 397, 403, 407, 425.
- John of Basoles, 392.
- John of Gand, 413.
- John of Naples, 392.
- John of St. Thomas, 424.
- John of Salisbury, 284, 288, 297, 299 f.
- John Peckham, 382.
- John Philoponus, 51, 159, 211.
- John Scotus Erigena, 223, 246 ff., 289.
- Johnson, Samuel, 634.
- Jouffroy, 608.
- Julian, 210.
- Justin, Martyr, 220.
- Kanâda, 24.
- Kant, 391, 525, 528 ff., 550, 555, 562, 586, 622.
- Kantians, 548.
- Kapila, 21.
- Kepler, 432.
- Keynes, 648.
- Kleutgen, 640.
- Knutzen, 528.
- Krug, 549.
- Lacordaire, 641.
- Lactantius, 220.
- Ladd, 650.
- Lamarck, 619.
- Lamennais, 604 ff.
- La Mettrie, 503.
- Lanfranc, 247, 271, 272.
- Lange, 644.
- Lao-tse, 13.
- Laplace, 618.
- Law, Heraclitus' concept of, 55, 57; Stoic concept of, 171; St. Thomas' definition of, 377.
- Lazarus, 646.
- Leibniz, 446, 506 ff., 539.
- Lepidi, 643.
- Leroux, 612.
- Lessing, 524 f.
- Leucippus, 61, 65.
- Liberatore, 642.
- Lipsius, 427.

- Littré, 611.
 Locke, 403, 446, 486 ff.
 Logos, Heraclitus' doctrine of, 55;
 Philo's, 202; the Stoics', 169.
 Lombroso, 648.
 Lorenzelli, 643.
 Lotze, 645, 650.
 Lucan, 164, 193.
 Lucretius, 176, 193.
 Lully, *see* Raymond Lully.
 Luther, 439.
 Luys, 647.
 Lyceum, *see* Peripatetic school.
 Lychetus of Brescia, 392.
 Lyell, 619.
 McCosh, 635.
 Machiavelli, 439.
 Mackintosh, 596.
 McTaggart, 647.
 Maimon, 549.
 Maimonides, Moses, 316, 467.
 Maine de Biran, 606 f.
 de Maistre, 602.
 Malebranche, 464 f.
 Malthus, 620.
 Mamiani, 633.
 Mandeville, 497 f.
 Manes, 29, 219.
 Manicheism, 29, 219.
 Mansel, 601, 621.
 Mantegazza, 648.
 Marcion, 218.
 Marcus Aurelius, 164, 194.
 Marsh, 635.
 Marsilius of Inghen, 409.
 Martineau, 627, 648.
 Marx, 583.
 Materialism, of the Atomists, 66 ff.; of
 the Epicureans, 177 ff.; French ma-
 terialism of the eighteenth century,
 502 ff.; German contemporary, 644;
 of Hobbes, 444; of Renaissance
 period, 427.
 Mathematical certitude, Mill's criticism
 of, 617.
 Mathematics, of Babylonians, 8; of
 Euclid, 189; of the Pythagoreans,
 40 f.
 Maudsley, 648.
 Maurice the Irishman, 425.
 Maximus Confessor, 223.
 Maximus of Tyre, 205.
 Mayer, 644.
 Mazdeism, 28.
 Mechanism, of the Atomists, 66, 67; of
 the Epicureans, 178; of Descartes,
 455 ff.
 Megarians, 85 ff., 92.
 Melanchthon, 439.
 Melissus, 44, 51.
 Mendelssohn, 524.
 Menedemus, 87.
 Meng-tse, 15.
 Menippus, 87.
 Mercier, C. A., 648.
 Mercier, D., 644.
 Metaphysics, origin of name, 127.
 Method, deductive, of Descartes, 449;
 eristic, of the Sophists, 71, 86; heu-
 ristic, of Socrates, 80, 81; Scholastic,
 260, 287, 327.
 Metrodorus, 175.
 Michael Ephesius, 310.
 Michael Psellus, 310.
 Michael Psellus the Younger, 310.
 Michael Scott, 320.
 Mill, James, 615.
 Mill, John Stuart, 608, 615 ff.
 Mirandola, F. Pico della, 427.
 Mirandola, G. Pico della, 427.
 Mivart, 627.
 Moderatus of Gades, 204.
 Modes, Spinoza's doctrine of, 470.
 Moleschott, 644.
 Monadism, 507 ff.
 Monboddo, Lord, 595.
 Montaigne, 427.

- Montesquieu, 504.
 More, Sir Thomas, 442.
 Morgan, C. Lloyd, 648.
 Morgan, Thomas, 495.
 Moses, *see* Maimonides, Moses.
 Motacallimîn, 312.
 Motazilites, 312.
 Musonius, 193.
 Mysticism, 302 ff., 332, 411.
- Neckam, *see* Alexander Neckam.
 Nemesius, 223 n.
 Neo-Platonism, 102, 205 ff., 473.
 Neo-Scholasticism, 642 ff.
 Neo-Voluntarism, 649 f.
 Newman, 642.
 Newton, 432, 486, 494.
 Nicephorus, 310.
 Nicetas, 310.
 Nicholas de Orbellis, 392.
 Nicholas of Autrecourt, 415 f.
 Nicole, 462.
 Nicomachus of Gerasa, 204.
 Nietzsche, 592.
 Nifo, 427.
 Nikolaus of Cusa, 432.
 Nominalism, 266; of Hobbes, 443; of Locke, 491; of Ockam, 405 f; of Roscelin, 269 ff.; of the Stoics, 166.
 Notion, Hegelian doctrine of the, 570 ff.
 Novalis, 549.
 Numbers, in Jewish philosophy, 315; in Pythagorean philosophy, 40 f.
 Numenius, 205.
 Nyâya philosophy, 23 ff.
 Nys, 644.
- Ockam, *see* William of Ockam.
 Ockamism, 408 ff.
 Oken, 560.
 Olympiodorus, 211.
 Ontological argument, St. Anselm's, 275; Descartes', 452 f.; Leibniz', 511; Kant's criticism of, 539.
- Ontologism of the Cartesians, 464 f.; of Gerdil, 638 f.; of Gioberti, 633; of Rosmini, 632; St. Augustine and ontologism, 228 f.; St. Bonaventure and ontologism, 334 f.; St. Thomas and ontologism, 367.
 Ontology, origin of the name, 525.
Organon of Aristotle, origin of the name, 127.
 Orient, philosophy of the, 7 ff.; influence of, on Greek philosophy, 29 f.
 Origen, 221.
 Orphic cosmogonies, 31.
 Oswald, 594.
 Othlo of Regensburg, 271.
 Otto of Tournai, 281 ff.
 Ozanam, 641.
- Panætius, 164, 188.
 Pantheism, of Bruno and Campanella, 429 ff.; Hindu, 17 ff.; mediæval, 306 ff.; of Spinoza, 470 f.; of the Stoics, 168 ff.
 Panthelism, 588 f.
 Paracelsus, 427.
 Paris, University of, 321 ff.
 Parker, 635.
 Parmenides, 44, 47, 58.
 Pascal, 462 f.
 Paschasius Radbertus, 247.
 Patañgali, 22.
 Patristic philosophy, 217 ff., 420.
 Patrizzi, 428.
 Paulhan, 647.
 Paulsen, 645.
 Pecci, 643.
 Peirce, 649.
 Peripatetic school, 158 f.
 Persian philosophy, 26 ff.
 Persius, 164, 193.
 Personality, not defined by ancients generally, 105; Locke's concept of, 490.
 Pesch, 644.

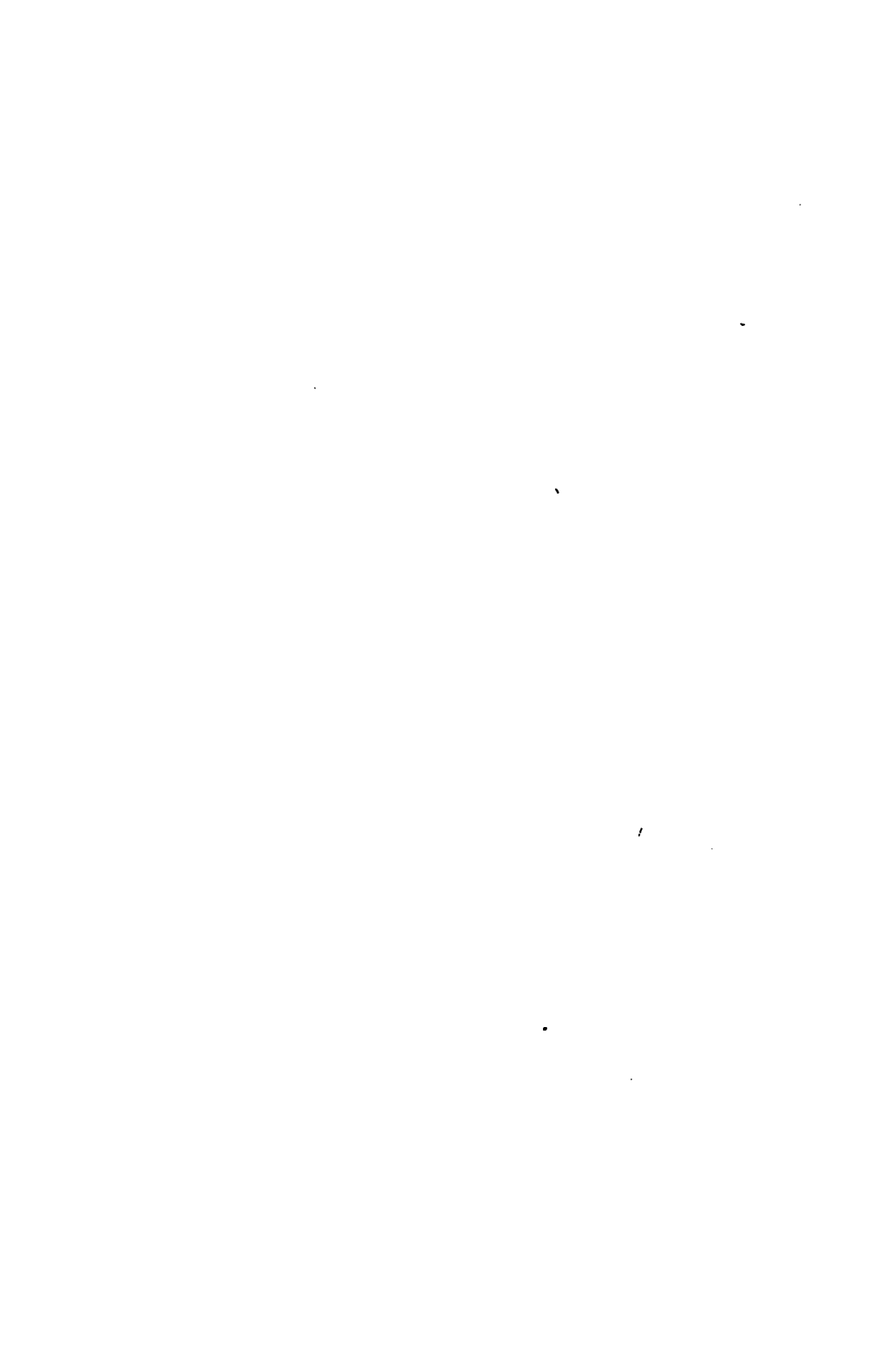
- Pestalozzi, 584.
 Peter Aureolus, 403, 404.
 Peter d'Ailly, 409.
 Peter Damian, St., 271.
 Peter de Palude, 392.
 Peter Hispanus, 382.
 Peter John Olivi, 382.
 Peter of Auvergne, 382.
 Peter the Lombard, 300.
 Phædo, 86.
 Phædrus, 175.
 Pherecydes, 31.
 Philip of Opus, 123.
 Philo of Larissa, 124, 188.
 Philo the Jew, 201 ff.
 Philolaus, 39, 41, 434.
 Philoponus, *see* John Philoponus.
 Photius, 310.
 Physico-theological argument, Kant's criticism of, 539.
 Piat, 647.
 Pillon, 646.
 Plato, 39, 45, 48, 52, 54, 57, 59, 63, 76, 77, 84, 88, 93 ff., 243, 293, 516.
 Pleroma of Gnostics, 219.
 Pletho, 426.
 Plotinus, 205 ff.
 Plutarch of Athens, 210.
 Plutarch of Chæronea, 205.
 Polystratus, 175.
 Pomponazzi, 427.
 Porphyry, 159, 209, 265.
 Porter, 636.
 Posidonius, 188.
 Positivism, 608 ff.
 Pragmatism, 649.
 Priestley, 595, 613.
 Principle of contradiction, according to Aristotle, 131, 135; according to Hegel, 567 f.; according to Heraclitus, 56; according to Nicholas of Autrecourt, 415; according to St. Thomas, 373.
 Principle of individuation, according to Durandus, 402; according to Henry of Ghent, 385; according to Scotus, 390; according to St. Thomas, 370.
 Principle of sufficient reason, 510.
 Proclus, 210 f., 317.
 Prodicus, 70, 74.
 Protagoras, 70, 72, 89, 90.
 Proudhon, 647.
 Psellus, *see* Michael Psellus.
 Pseudo-Dionysius, *see* Dionysius the Areopagite.
 Psycho-physics, 360, 461.
 Ptolemy, 189, 434.
 Ptolemy of Lucca, 377.
 Pufendorf, 524.
 Pûrva-Mîmâmsâ, 19.
 Pyrrho, 92, 184.
 Pythagoras, 39.
 Pythagorean philosophy, 38 ff., 52, 60, 189.
Quadrivium, 243.
 Quietism, in Neo-Platonism, 208; in Oriental philosophy, 18 f.; in Philo's philosophy, 203; in Stoicism, 173 f.
 Ramus, 428.
 Rationalism in philosophy of the Christian era, 216; in modern philosophy, 420; in Scholastic philosophy, 271.
 Ratramnus, 247.
 de Ravignan, 641.
 Raymond Lully, 394 f.
 Raymond of Sabunde, 409, 410.
 Raymond of Toledo, 320.
 Realism, 266; of Abelard, 287 ff.; of Albert the Great, 341; of Alexander of Hales, 327; of Aristotle, 132 ff.; of Gilbert de la Porrée, 297 f.; of the Indifferentists, 279 ff.; of Plato, 100 f.; of the school of Chartres, 293 ff.; of Scotus, 390; of St. Thomas, 352 ff.; of William of Champeaux, 279 f.

- Reid, 593 f.
 Reinhold, 548.
 Relativity of knowledge, according to
 Hamilton, 600; according to Protagoras, 72; according to the Sceptics, 185; according to Spencer, 622.
 Remi of Auxerre, 262 ff.
 Remi of Rheims, 247.
 Renaissance, 425 ff.
 Renouvier, 646.
 Reuchlin, 414.
 Revelation, *see* Faith and Reason.
 Reynaud, 612.
 Rhabanus Maurus, 245.
 Ribot, 647.
 Richard Fitzacre, 336, 381.
 Richard of Middletown, 381.
 Richard of St. Victor, 304.
 Richter, Jean Paul, 549.
 Ritchie, 647.
 Robert Greathead, 320, 335.
 Robert Holkot, 408.
 Robert Kilwardby, 381.
 Robert of Lincoln, *see* Robert Greathead.
 Robert Palley (or Pulley), 301.
 Roger Bacon, 324, 325, 335 ff.
 Rohrbacher, 606.
 Roland of Cremona, 381.
 Romagnosi, 630.
 Roman philosophy, 189 ff.
 Romanes, 620.
 Romanticism, 549.
 Roscelin, 269 ff., 285.
 Roselli, 638.
 Rosenkranz, 583.
 Rosmini, 631 f.
 Rousseau, 503 f., 560.
 Royce, 649 f.
 Royer-Collard, 607.
 Ruysbroek, 411.
 Saint-Simon, 611 f.
 Salmanticenses, 638 n.
 Samkara, 19.
 Sāmkhya philosophy, 21 ff.
 Sanchez, 427.
 Sanseverino, 642.
 Satolli, 643.
 Saturninus, 218.
 Say, J. B., 612.
 Scepticism, 184 ff.
 Sceptics, French, of the eighteenth century, 502 f.; of Greece, 184 ff.; of the Renaissance, 427.
 Schelling, 555 ff., 562, 587.
 Schematism of the categories, 534.
 Schiller, 549.
 Schlegel, 549.
 Schleiermacher, 560.
Schola Palatina, 241.
 Scholasticism, general character of, 417 ff.
Scholasticus, 243.
 Schools, Carolingian, foundation of, 241 ff.; library of, 243 ff.
 Schopenhauer, 583, 585 ff.
 Schoppe, 427.
 Schubert, 560.
 Schulze, 548.
 Schwarz, 646.
 Sciro, 176.
 Scotists, 392, 425.
 Scottish school, 592 ff.
 Scotus, *see* John Scotus Erigena and John Duns Scotus.
 Secrétan, 646.
 Sedulius Scotus, 242.
 Seelye, 637 n.
 Selection, natural, 619 f.
 Sensation, described by Aristotle, 148 f.; described by the Atomists, 68; described by Empedocles, 60; described by the Epicureans, 177; described by Kant, 531, 534; described by St. Thomas, 354 ff.
 Servatus Lupus, 247.
 Seth, A., 647.

- Seven Wise Men, 32.
 Sextians, the, 193.
 Sextus Empiricus, 186.
 Shaftesbury, 496 f.
 Sidgwick, 648.
 Siger of Brabant, 393.
 Signoriello, 642.
 Sigwart, 646.
 Simon of Tournai, 324.
 Simplicius, 159, 211.
 Sismondi, 612.
 Smith, Adam, 499.
 Socialism, 612.
 Society, origin of, according to Aristotle, 155; according to the Epicureans, 179; according to Hobbes, 444; according to Rousseau, 504; according to St. Thomas, 377.
 Socrates, 52, 70, 75, 76, 77 ff., 86, 92, 93, 115.
 Socratic schools, 84 ff.
 Soncinas, 424.
 Sophists, 70 ff.
 Sotion, 193.
 Soto, *see* Dominic de Soto.
 Space, according to Aristotle, 144; according to the Atomists, 66; according to the Epicureans, 178; according to Kant, 531; according to Plato, 106; according to St. Thomas, 371.
 Spencer, 621 ff.
 Speusippus, 122.
 Spinoza, 446, 466 ff., 552, 554.
 State, Aristotle's theory of, 155; Campanella's theory of, 431; Hegel's theory of, 577 ff.; Hobbes' theory of, 444; Locke's theory of, 492 f.; Plato's theory of, 116; Rousseau's theory of, 504; St. Thomas' theory of, 363 ff.
 Staudenmaier, 640.
 Steffens, 560.
 Steinthal, 646.
 Stephen Langton, 327.
 Stephen, Leslie, 648.
 Stewart, 595.
 Stilpo, 85.
 Stirling, 628, 647.
 Stobæus, 51.
 Stöckl, 640.
 Stoics, 57, 89, 163 ff., 182.
 Strato of Lampsacus, 159.
 Strauss, 583.
 Stumpf, 646.
 Suarez, 425.
 Substance, Aristotle's doctrine of, 133; Berkeley's doctrine of, 515; Cartesian dualism of, 453; Hobbes' doctrine of, 444; Hume's denial of, 520; Kant's category of, 533; Locke's doctrine of unknowableness of, 489; Spinoza's doctrine of, 468.
 Sufis, 312.
 Suidas, 310.
 Sully, 648.
 Survival of the fittest, 624.
 Suso, 414.
 Sylvester II, Pope, *see* Gerbert.
 Sylvester Maurus, 638.
 Syrianus, 210.
 Syro, 176.
 Talamo, 642.
 Tarde, 647.
 Tatian, 220.
 Tauler, 414.
 Telesio, 428.
 Terminism, 405 f.
 Tertullian, 220.
 Tetens, 524.
 Thales, 34.
 Themistius, 210.
 Theodore of Gaza, 427.
 Theodoric of Chartres, 294 ff.
 Theodorus, 91.
 Theophilus, 220.

- Theophrastus, 65, 158.
 Thierry, 612.
 Thilly, 650.
 Thomas à Kempis, 412.
 Thomas Bradwardine, 416.
 Thomas de Vio Cajetan, 424.
 Thomas of Aquin, St., 276, 308, 315, 322, 330, 340, 343 ff., 388, 392, 433, 643.
 Thomas of Cantimpré, 320.
 Thomas of Strasburg, 409.
 Thomasius, 524.
 Thomists, 382.
 Thrasyllus, 205.
 Timon of Phlius, 184.
 Tindal, 495.
 Toland, 495.
 Toletus, 425.
 Tönnies, 646.
 Tracy, Destutt de, 602.
 Traditionalism, 602 ff.
 Trendelenburg, 645.
Trivium, 243.
 Trombetta, 425.
 Tropes, of Ænesidemus, 186; of Agrippa, 186.
 Tschirnhausen, 524.
 Turgot, 609.
 Tyndall, 620.
- Ueberweg, 584.
 Ulric of Strasburg, 382.
 Universals, controversy concerning, 265 ff.; see also Conceptualism, Nominalism, Realism.
 Universities, rise of, 321 ff.
 Upanishads, 16 ff.
 Utilitarianism, 614 ff.
 Uttara-Mīmāṃsā, 19.
- Vacherot, 646.
 Vaisheshika philosophy, 24 ff.
 Valentinus, 218.
 Valla, 427.
- Varro, 193.
 Vasquez, 425.
 Veda, 15.
 Vedānta philosophy, 19 ff.
 Veitch, 648.
 Ventura, 606.
 Vera, 634.
 Vico, 630.
 Victorines, 279, 303 ff., 332.
 Vincent of Beauvais, 383.
 Virtue defined, by Aristotle, 154; by St. Augustine, 233; by the Cynics, 88; by the Cyrenatics, 91; by Shaftesbury, 497; by the Stoics, 171; by St. Thomas, 376.
 Vogt, 644.
 Voltaire, 502.
 Voluntarism and intellectualism, 369, 386, 390 f.
 Vyāsa, 19.
- Wagner, 592.
 Wallace, A. R., 620.
 Wallace, W., 647 f.
 Walter Burleigh, 392.
 Walter of Mortagne, 284 ff.
 Walter of St. Victor, 304 f.
 Watson, 649.
 Weber, 645.
 Weigel, 414, 439.
- Will, freedom of, according to St. Anselm, 277; according to Aristotle, 153; according to St. Augustine, 233; according to the Epicureans, 180; according to Erigena, 256; according to Plato, 114; according to the Stoics, 170; according to St. Thomas, 368 f.
- William de la Marre, 381.
 William Durandus, 400 ff.
 William Mackelfield, 382.
 William Moerbeka, 320.
 William of Auvergne, 324 ff.
 William of Champeaux, 279 ff., 283, 285.

- William of Conches, 295 ff.
 William of Ockam, 399, 404 ff.
 William of St. Amour, 323, 330, 382.
 William of Shirwood, 383 n.
 Willmann, 646.
 Windelband, 646.
 Wise Men, the Seven, 32.
 Wolff, 525.
 Wollaston, 495.
 World-soul, in Aristotle's philosophy, 146; in philosophy of the school of Chartres, 293; in Neo-Platonism, 207; in Plato's philosophy, 107 f.
 Worms, 647.
 de Wulf, 644.
 Wundt, 646.
 Xenocrates, 98, 108, 122.
 Xenophanes, 44, 45.
 Xenophon, 77, 79, 82, 84.
 Yoga philosophy, 22 f.
 Zarathustra, *see* Zoroaster.
 Zeller, 646.
 Zeno of Cittium, 163.
 Zeno of Elea, 44, 49, 52, 70, 72.
 Zeno of Sidon, 175.
 Zeno of Tarsus, 164.
 Ziegler, 646.
 Zigliara, 643.
 Zoroaster, 27 ff.
 Zwingli, 439.



U





3 9015 00329 3209

